MJ BARINA SPARK

MJ Barina Spark
Owner’s Handbook

GM Holden Ltd, ABN 84 006 893 232 (hereinafter Holden)

Change of name, address or ownership

In the event of a Safety Recall, or for various reasons, Holden may need to contact you as the owner of this vehicle.

If you have recently changed your address, or name, or purchased this vehicle second-hand, please help us to help you by taking a few minutes to fill in and mail the forms at the beginning of the Service/warranty booklet.

For information about GM Holden's privacy policy or to update owner details online, please visit Holden's website at www.holden.com.au

Note Please refer to the inside front cover of the Service/ warranty booklet for the Vehicle Identification Certificate.

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Introduction

We thank you for choosing Holden and want to assure you of our continuing interest in your driving pleasure and satisfaction.

This handbook applies to the current Barina Spark model. Therefore, due to different models and options, you may find reference in this Handbook to some equipment not fitted to your own vehicle.

Please note that all information, illustrations and specifications in this Handbook are based on the latest production information available at the time of printing. Holden reserves the right to make changes at any time without notice and without incurring any obligation.

Introduction

Your vehicle is a designed combination of advanced technology, safety, environmental friendliness and economy.

This Owner's Handbook provides you with all the necessary information to enable you to drive your vehicle safely and efficiently.

Make sure your passengers are aware of the possible risk of accident and injury which may result from improper use of the vehicle.

Using this manual

- The In brief section will give you an initial overview.
- The table of contents at the beginning of this manual and within each chapter shows where the information is located.
- The index will enable you to search for specific information.
- Directional data, e.g. left or right, or front or back, always relate to the direction of travel.
- Depending on the model variant, integrated special equipment and accessories, the scope of equipment of your vehicle can differ from the descriptions in this Owner's Handbook.
- iPod® is a registered trademark of Apple Inc.

Danger, warnings and cautions

⚠Danger

Text marked ⚠ **Danger** provides information on risk of fatal injury. Disregarding this information may endanger life.

⚠Warning

Text marked ⚠ **Warning** provides information on risk of accident or injury. Disregarding this information may lead to injury.

Caution

Text marked **Caution** provides information on possible damage to the vehicle. Disregarding this information may lead to vehicle damage.

In brief

Initial drive information

Locking/unlocking the vehicle

Remote keyless entry

The key operates all locks and the ignition.

- Press to lock the doors and the tailgate.
- Press to unlock the doors and the tailgate.

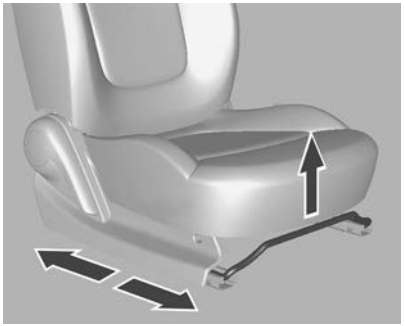
Doors, see page 17.

Central locking system, see page 16.

Tailgate, see page 18.

Seat adjustment

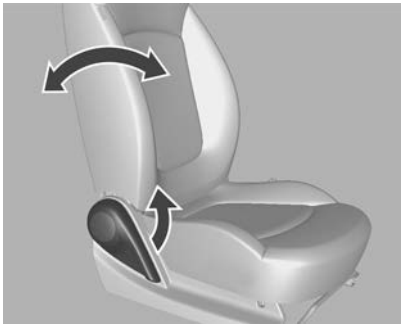
Seat positioning



1. Move the seat forwards or backwards by lifting the bar at the front and sliding the seat.
2. Release the bar to engage the latch.

Seats, restraints, see page 24.

Seat backrests

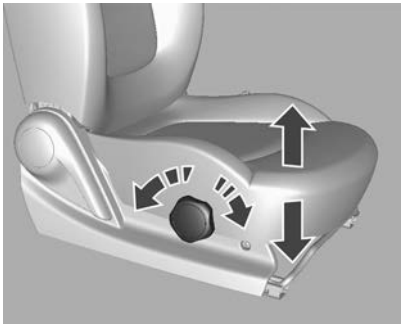


1. Recline the seatback by pulling the lever.
2. Adjust the angle and release the lever.
3. Allow the seat to engage audibly.

Note
Do not lean on the seat when adjusting.

Seats, restraints, see page 24.

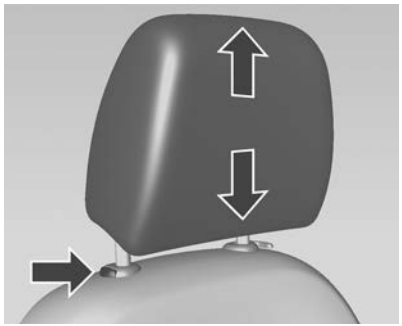
Seat height



- Rotate the hand wheel to adjust the height of the seat.

Seats, restraints, see page 24.

Head restraint adjustment



- Lift the head restraint up to raise.
- Push the locking button and push the head restraint down to lower.
- Push the locking button and pull the head restraint up to remove.

Head restraints, see page 24.

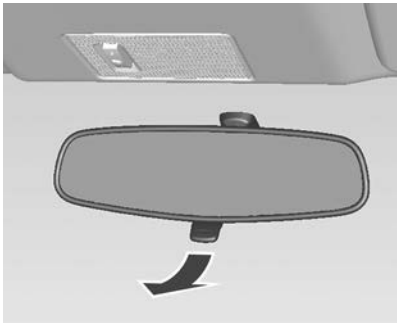
Seat belts

1. Withdraw the belt from the reel.
2. Pull the metal tongue across your body into the buckle, until it clicks into place.
3. Tension the lap belt regularly while driving by tugging the shoulder belt.

Seat belts, see page 29.

Mirror adjustment

Interior mirrors



To reduce headlamp glare from following vehicles, pull the lever towards the rear of the vehicle.

Interior mirrors, see page 21.

Exterior mirrors

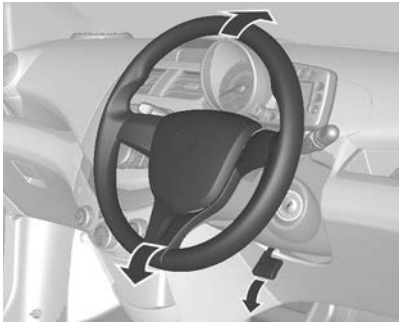
To adjust the external rear view mirrors:

- Push the switch on the left side **L** to operate the passenger side mirror.
- Push the switch on the right side **R** to operate the driver side mirror.
- Push the switch to adjust the selected mirror.

Power mirrors, see page 20.

Folding mirrors, see page 20.

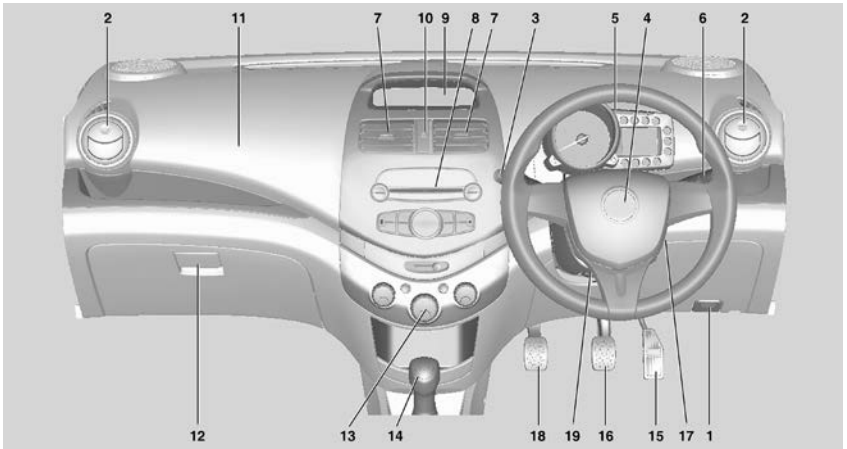
Steering wheel adjustment



1. To unlock, move the lever down.
2. Adjust the steering wheel.
3. To lock, move the lever up. Ensure the steering wheel is locked in position before driving.

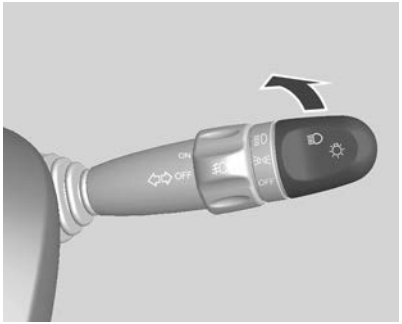
Steering wheel adjustment, see page 44.

Instrument panel overview



1. Bonnet release lever
2. Side air vents
3. Wiper and washer lever
4. Horn and driver’s airbag
5. Instrument panel
6. Lamp control
7. Centre air vents
8. Infotainment system
9. Centre display
10. Hazard warning flasher
11. Passenger’s airbag
12. Glove box
13. Air conditioning system
14. Shift lever
15. Accelerator pedal
16. Brake pedal
17. Ignition switch/lock
18. Clutch pedal
19. Steering wheel adjustment

Exterior lighting



OFF: Turns all lamps and lights off.

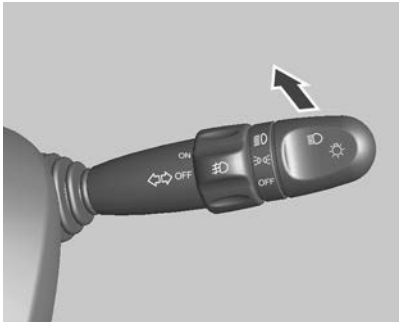
(Park lamps): Turns on the park lamps, number plate lamps and instrument panel lighting.

(Headlamps): Turns on the headlamps and all park lamps, when the ignition is turned on.

The headlamps turn off automatically when the ignition key is turned to the LOCK position and the driver's door is opened.

Exterior lighting, see page 57.

High/low beam



To activate high beam:

1. Turn the headlamps on.
2. Push the lever forwards.

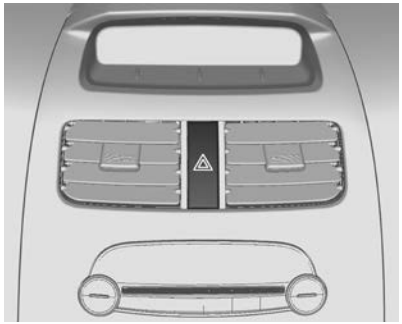
   The high beam indicator lamp illuminates on the instrument panel.

To return to low beam:

1. Pull the lever rearwards.

Exterior lighting, see page 57.

Hazard warning flashers



Press ⚠ to turn the hazard warning flasher on or off, when the ignition is in any position.

All turn signals flash continuously.

Use the hazard warning flasher if the vehicle becomes a traffic hazard, day or night.

Note
Using hazard warning flashers while the vehicle is moving, is illegal in some States and Countries.

Lighting, see page 57.

Turn and lane change signals

- Push the lever in the direction the steering wheel is turned.
- A green arrow on the instrument panel flashes when the lamps are in operation.

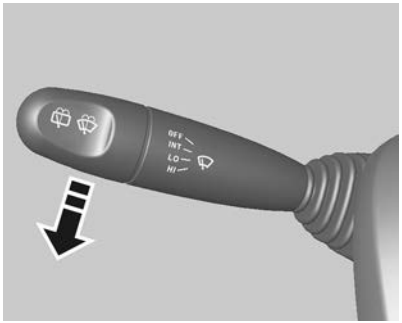
Lighting, see page 57.

Horn

Press .

Windscreen wiper/washer

Windscreen wiper

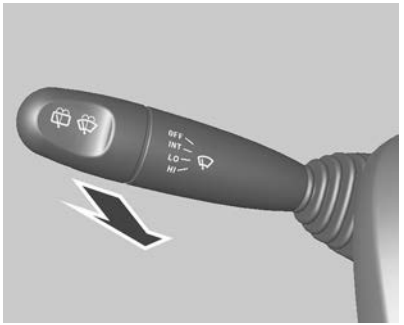


0FF	Off
INT	Intermittent wipe
LO	Continuous slow speed
HI	Continuous fast speed

Note Wipers cycle once while the lever is pushed down slightly and released.

Windscreen wiper/washer, see page 45.

Windscreen washer



Pull to wash the windscreen. Washer fluid is sprayed and the wipers cycle for a short time.

Windscreen wiper/washer, see page 45.

Air conditioning system

The air conditioning panel is located in the centre of the dashboard.

Climate control, see page 71.

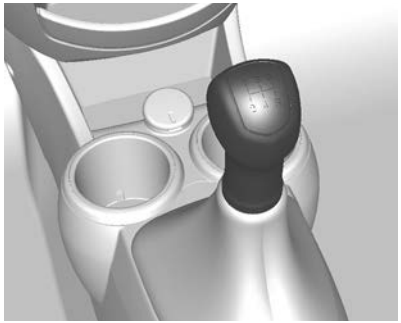
Air conditioning system, see page 71.

Windscreen demister, see page 73.

Rear window demister, see page 74.

Transmission

Manual transmission



- When shifting from one gear to another, push the clutch pedal to the floor.
- Do not engage reverse gear while the vehicle is still moving.
- Pause between pressing the clutch pedal and moving into reverse gear.

Manual transmission, see page 80.

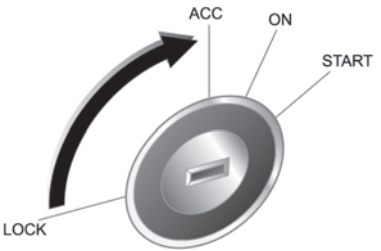
Getting started

1. Check that windows, mirrors and lamps are clean.
2. Visually check tyre inflation. Check tyre pressures weekly.
3. Close and secure all doors.
4. Position the seat for comfortable driving.
5. Adjust rear view mirrors.
6. Fasten seat belts.
7. Check that warning indicators illuminate when turning the ignition on.

Warning lights, gauges and indicators, see page 48.

Driving and operating, see page 76.

Starting the engine



⚠Warning

Do not turn the engine off while the vehicle is moving as there will not be any power assist for brakes or steering.

Never remove the key while the vehicle is moving, as this will lock the steering.

LOCK: The key can only be inserted and removed from this position.

ACC**:** When the key is in this position, the audio system operates.

ON: When the key is in this position, the engine is ready to start and all electrical systems are active.

Do not leave the switch in this position for a long time, unless the engine is running, otherwise the vehicle's battery will discharge.

START: Turn the key to this position and release when the engine is running.

Ignition positions, see page 77.

Parking

1. Apply the park brake.
2. If facing uphill or on flat ground, select 1st gear. If facing downhill, select reverse gear.
3. Shut all windows.
4. Turn the ignition off and remove the key.
5. Press on the key to lock all doors.

Vehicle security, see page 19.

Driving and operating, see page 76.

Keys, doors and windows

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Doors 17
Vehicle security 19
Exterior mirrors 20
Interior mirrors 21
Windows 21

Keys and locks

Keys

The key operates all locks and the ignition.

- Press to lock the doors and the tailgate.
- Press to unlock the doors and the tailgate.

See Doors on page 17.

See Central locking system on page 16.

See Tailgate on page 18.

About the keys

- The remote control has a range of approximately 20 metres.
- The range depends on the charge of the key battery, on ambient conditions, the key's location and the area between them.
- Take care that no button is pressed unintentionally, especially when the vehicle is out of sight.
- Protect from moisture and high temperatures.

The key buttons may not work if:

- More than 20 metres from the vehicle.
- Battery voltage is too low. See Battery replacement on page 15.
- The key buttons are operated repeatedly while not in range of the vehicle.

- The central locking system is operated at frequent intervals.
- The power supply is interrupted for a short time.
- The vehicle is parked near strong radio activity.

Replacement keys

If a key is lost, a replacement can be ordered through any Holden Dealer by quoting the key code number. The number is printed on a detachable tag supplied with the key.

Radio remote control

Battery replacement

As soon as the range of the remote control reduces, replace the battery:

Use CR1620 (or equivalent) battery.

1. Remove the screw from the back cover.
2. Open the cover.
3. Remove the transmitter unit.
4. Carefully detach the sticker from the unit and store in a clean location.
5. Remove the used battery without touching other components.
6. Install the new battery with the negative side (-) facing down.
7. Reattach the sticker.
8. Replace the transmitter unit.
9. Replace the back cover.
10. Check key operation.

Caution
Avoid touching the flat surfaces of the battery, the circuit board and other components inside the remote control with bare fingers. Handling will shorten battery life.

Note

- Batteries do not belong in household waste. Dispose of at an appropriate recycling collection point.
- Avoid dropping the transmitter.
- Do not place heavy objects on the transmitter.

- Keep the transmitter away from water and direct sunlight.

  If the transmitter gets wet, wipe it with a soft cloth.

Central locking system

Doors may be locked and unlocked by pushing buttons on:

- The driver's door
- The key, from inside or outside the vehicle

Note
The driver's door must be closed for the central locking system to work.

Unlocking

- Press .

  All doors unlock.

  The hazard lamps flash twice.

Locking

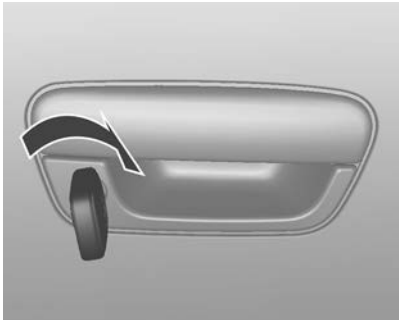
- Press .

  All doors lock.

  The hazard lamps flash once.

Doors

Manual door locks



Unlocking:

1. Insert the key into the driver's door by turning the key towards the front of the vehicle.

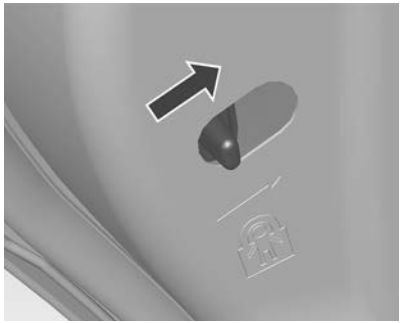
   The other doors can be opened with the door handle.

Locking:

1. Push the locking knob on the inside of all doors, except the driver's door.
2. Close the driver's door and lock from the outside with the key.

   Insert the key and turn towards the rear of the vehicle.

Child safety rear door locks



⚠Warning

Use the child security door locks whenever children are occupying the rear seats.

To prevent the doors from being opened from the inside, move the lever up to the lock position.

Caution

Do not pull the inside door handle while the child security door is locked. Damage may occur.

To open a rear door when the child security door lock is activated, open the door from the outside.

Tailgate

⚠Warning

Do not drive with the tailgate open or ajar, e.g. when transporting bulky objects. Dangerous exhaust fumes may enter the vehicle.

To avoid injury and/or damage to the vehicle, check each time, before the tailgate is closed, that the contact area is unobstructed.

Caution

Before opening the tailgate, check the area above and behind for obstructions, to avoid damage to the tailgate.

Note
Adding heavy accessories to the tailgate may affect its ability to remain open.

Remote unlocking/locking

Unlocking:

1. Press .
2. Pull the handle upwards.

Locking:

1. Push down so it latches securely.
2. Press .

Manual unlocking/locking

Unlocking:

1. Insert the key into the key slot.
2. Turn the key anticlockwise.
3. Pull the handle upwards.

Locking:

1. Push the tailgate down so it latches securely.
2. Insert the key into the key slot.
3. Turn clockwise to lock.

Vehicle security

Immobiliser

The immobiliser prevents unauthorised engine starting.

- If an invalid key is inserted into the ignition switch/lock, an indicator on the instrument panel will flash.

  The vehicle will not start.
- The engine is automatically immobilised when the key is turned to the LOCK position and is removed from the ignition switch/lock.
- Only valid ignition keys can be used to start the engine.
- If there is a fault with the system, the light will illuminate.

Auto door lock

When unlocking the doors with the remote key, all doors will lock automatically after approximately 30 seconds if:

- The doors remain closed.
- The ignition key is not in the ACC or ON positions.

Exterior mirrors

Convex mirror

The convex exterior mirrors provide a wider view of the road and traffic.

Note
Objects appear smaller than their actual size.

Power mirrors

To adjust the external rear view mirrors:

- Push the switch on the left side **L** to operate the passenger side mirror.
- Push the switch on the right side **R** to operate the driver side mirror.
- Push the circular switch to adjust the selected mirror.

Folding mirrors

When the vehicle is parked, the mirrors may be folded flat against the side of the vehicle.

⚠Warning

Always extend mirrors outwards for driving to increase visibility.

Do not drive while either exterior mirror is folded against the vehicle.

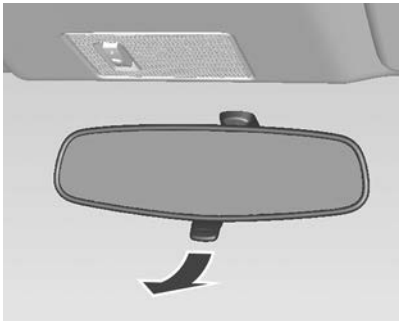
Heated mirrors

The vehicle has heated rear view mirrors.

The heating is switched on automatically when the rear window demister is switched on.

Interior mirrors

Rear view mirror



To reduce headlamp glare from following vehicles, pull the lever towards the rear of the vehicle.

Note

The rear view clarity is reduced when the mirror is set to the anti-glare position.

Return the lever back to its original position as soon as the glare has disappeared.

Windows

Manual windows

The vehicle may have manual rear door windows.

Windows may be opened or closed by turning the window winders.

Power windows

⚠Warning

Before operating the power windows, check they are free of obstructions and that passengers and pets are not in the proximity of the moving window.

The vehicle has front power windows and may have rear power windows.

The power windows can be operated when the ignition is turned on.

Push and hold or pull and hold the required button, to raise or lower a window.

The window stops moving up as soon as the button is released.

⚠Danger

Do not leave keys or children unattended in the vehicle.

Children may operate the switches and become trapped in the windows.

Serious injury or death may occur from misuse of power windows.

Child safety switch

Press ⛌ to activate/deactivate the rear door power window switches.

Sun visors

The sun visors may be folded down or folded outwards over the side window, to prevent glare.

- The sun visors may have mirrors.
- Close the mirror cover when driving.

⚠Warning

Do not place the sun visor in such a position that reduces visibility of the roadway, traffic or other objects.

Seats, restraints

Head restraints 24
Front seats..... 25
Rear seats 27
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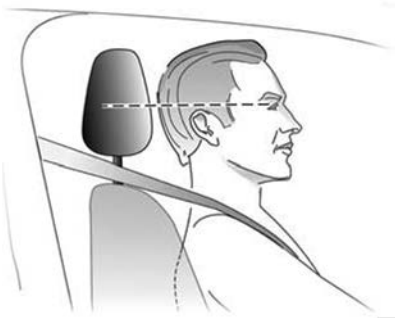
Head restraints

⚠Warning

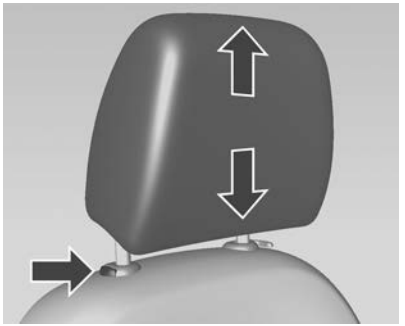
This safety feature is not intended as a headrest. It is solely for the reduction of whiplash neck movement in an accident involving your vehicle.

The centre of the head restraint should be at eye level, never at neck level.



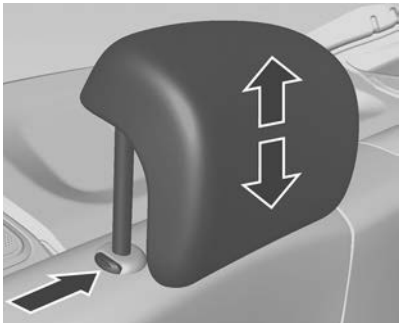
Height adjustment

Front head restraints



- Push the locking button and push the head restraint down to lower.
- Push the locking button and pull the head restraint up to remove.

Rear head restraints



- Push the locking button and push the head restraint down to lower.
- Push the locking button and pull the head restraint up to remove.

Front seats

Seat position

⚠Warning

To avoid reducing the effectiveness of seat belts, seatbacks should only be upright or at most semi-reclined when the vehicle is moving.

- Sit centrally in the seat.
- Use the backrest and cushion for support.
- Adjust the seat so that your legs are slightly angled when against the pedals.
- Adjust the backrest angle to easily reach the steering wheel with arms slightly bent. See Steering wheel adjustment on page 44.
- Maintain contact between shoulders and the backrest when turning the steering wheel.
- Adjust the head restraint. See Head restraints on page 24.
- Slide the passenger seat as far back as possible.

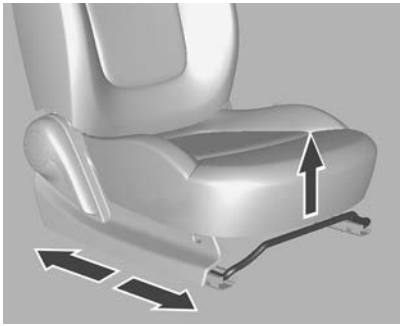
Seat adjustment

⚠Danger

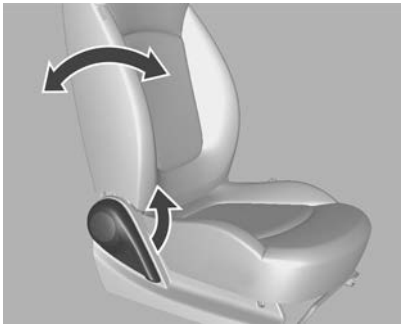
Do not sit nearer than 25 cm from the steering wheel, to allow safe airbag deployment.

⚠Warning

Do not adjust the driver's seat when the vehicle is moving as the seat could move suddenly causing the driver to lose control.

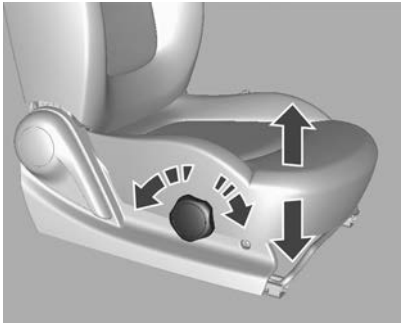


1. Move the seat forwards or backwards by lifting the bar at the front and sliding the seat.
2. Release the bar to engage the latch.



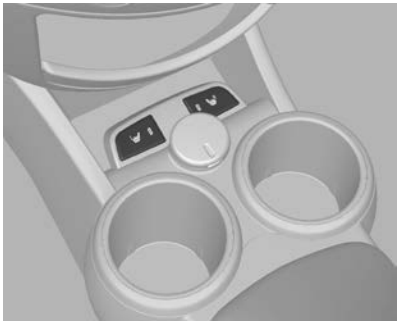
1. Recline the seatback by pulling the lever.
2. Adjust the angle and release the lever.
3. Allow the seat to engage audibly.

Note
Do not lean on the seat when adjusting.



- Rotate the hand wheel to adjust the height of the seat.

Heated front seats



The vehicle may have heated front seats.

To warm the seat:

1. Turn the ignition key to the ON position.
2. Press or .

   The light in the button illuminates.

To turn the heater off:

1. Press or again.

Note
Prolonged use of the heated seats for people with sensitive skin is not recommended.

Rear seats

Folding down rear seatbacks

⚠Danger

Ensure the rear seatbacks are securely in place.

Do not press the release button on the top of the seatback while the vehicle is moving. This could cause damage or injuries to the occupants.

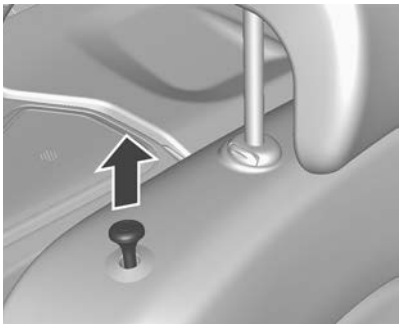
Do not allow passengers to sit on the folded seatbacks while the vehicle is in motion. Unrestrained luggage or passengers on a folded seatback could be thrown within or ejected from the vehicle in a sudden stop or accident.

Caution

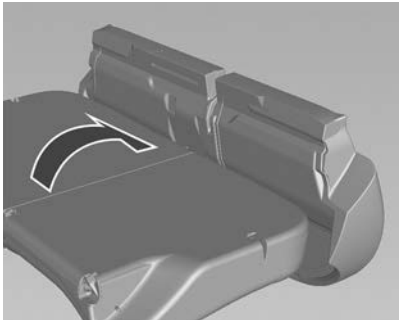
Do not trap the seat belt when returning the seatback to the upright position.

To fold the rear seatbacks down separately:

1. Slide the front seat forwards.
2. Adjust the front seatback to an upright position.
3. Remove the rear seat head restraints.
4. Pull up the front of the rear seat cushion to release it.
5. Guide the rear seat cushion to an upright position.



6. Pull the release knob on top of the rear seatback upwards.



7. Fold the rear seatback forwards and down.
8. Adjust the front seats to the desired position.

To return the seatback to the upright position:

1. Lift the seatback upwards and push firmly back into place.

   Make sure the seat belts are clear of the latch.
2. Place the rear part of the seat cushion in its original position.

   Note

   Make sure the seat belts are not twisted or caught under the seat cushion.
3. Push the front part of the seat cushion down firmly until it latches.

Seat belts

⚠Warning

Seat belts are designed to bear upon the bony structure of the body, and should be worn low across the front of the pelvis or the pelvis, chest and shoulders, as applicable; wearing the lap section of the belt across the abdominal area must be avoided.

Seat belts should be adjusted as firmly as possible, consistent with comfort, to provide the protection for which they have been designed. A slack belt will greatly reduce the protection afforded to the wearer.

Care should be taken to avoid contamination of the webbing with polishes, oils and chemicals, and particularly battery acid.

Belts should not be worn with straps twisted.

Each belt assembly must only be used by one occupant. It is dangerous to put a belt around a child being carried on the occupant's lap.

No modifications or additions should be made by the user which will either prevent the seat belt adjusting devices from operating to remove slack, or prevent the seat belt assembly from being adjusted to remove slack.

The belts lock during heavy acceleration or deceleration for the safety of the occupants.

Belt force limiters

In the front seats, stress on the body is reduced by the gradual release of the belt during a collision.

Belt tensioners

In the event of a front, side or rear collision of a certain severity, the driver's and/or passengers safety belts are tightened.

⚠Warning

Incorrect handling (e.g. removal or fitting of belts or belt buckles) can trigger the belt tensioners causing a risk of injury.

When the belt tensioners have been deployed, illuminates on the instrument panel. See Seat belt reminder on page 51.

Triggered belt tensioners must be replaced.

Belt tensioners are only triggered once.

⚠Warning

Do not attach or install objects that may interfere with the operation of the belt tensioners.

Do not make any modifications to belt tensioner components.

Three point belt

Fitting

The belt should not be twisted. It should lie flat and fit firmly across your hips.

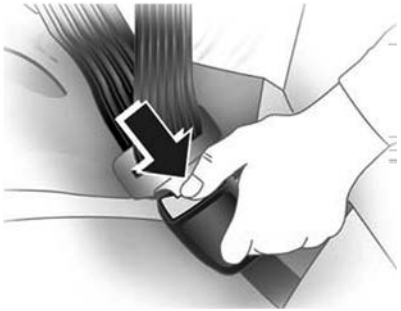
1. Withdraw the belt from the reel.
2. Pull the metal tongue across your body into the buckle, until it clicks into place.
3. Tension the lap belt regularly while driving by tugging the shoulder belt.

Do not place objects such as handbags or mobile phones between the belt and your body.

⚠Warning

The belt must not rest against hard or fragile objects in the pockets of your clothing.

Removing



1. Press the release button on the buckle.
2. Allow the belt to retract.
3. Check that it fully retracts without twisting or turning.

Seat belt use during pregnancy

⚠Warning

The lap belt must be positioned as low as possible across the pelvis to prevent pressure on the abdomen.

Seat belts work for everyone, including pregnant women. Like all occupants, they are more likely to be seriously injured if they do not wear a seat belt.

A pregnant woman should wear a three point belt with the lap portion of the belt worn as low as possible below the rounding of their stomach, throughout the pregnancy.

Seat belt care

⚠Warning

Care should be taken to avoid contamination of the webbing with polishes, oils and chemicals, and particularly battery acid. Cleaning may safely be carried out using mild soap and water. The belt should be replaced if webbing becomes frayed, contaminated or damaged.

Replacing seat belts after a crash

⚠Warning

It is essential to replace the entire assembly after it has been worn in a severe impact even if damage to the assembly is not obvious.

Airbag system

When triggered, airbags inflate within milliseconds. They also deflate so quickly that it is often unnoticeable during the collision.

⚠Danger

Do not make any modifications to the airbag system.

The driver should sit back as far as possible while still maintaining control of the vehicle. Sitting too close to the airbag, can cause death or serious injury when it inflates.

Always wear a seat belt.

⚠Warning

WARNING – EXTREME HAZARD

Do not use a rearward facing child restraint on a seat protected by an airbag in front of it.

The child could be seriously injured if the airbag inflates, as the child's head would be very close to the inflating airbag.

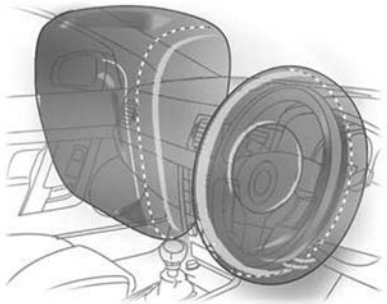
Remember that it is safest for children to be seated in the rear seats. See Child restraints on page 36.

⚠Warning

Airbags are part of the supplemental restraint system (SRS) as they assist, but do not replace seat belts. Airbags do not deploy in every accident. Various factors dictate whether they deploy including speed, angle of collision and object hit. Airbags are not designed to inflate if the vehicle is hit from the rear or is involved in a rollover. Seat belts must be worn by all passengers whenever the vehicle is moving.

Airbags inflate with great force. If you are too close to an inflating airbag it may cause injury.
Seat belts help keep you in position for airbag inflation in the event of a collision.

Front airbag system



The front airbag system consists of one airbag in the steering wheel and one in the dashboard on the passenger side. These are identified by the word **AIRBAG**.

⚠Warning

The horn pad must not be covered with adhesive or any other material.

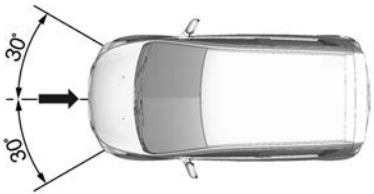
The driver should adjust the seat as far rearward as possible while still maintaining control of the vehicle.

⚠Warning

Do not place any objects on or over the dashboard or between an airbag and yourself.

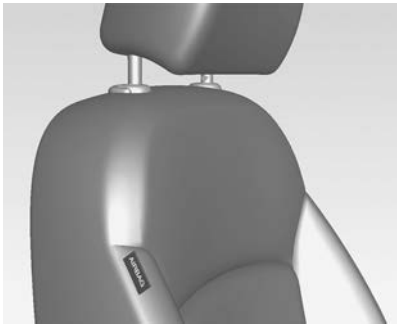
Do not hang anything from the sun visor or mirror.

Passengers must not rest their feet on the dashboard.



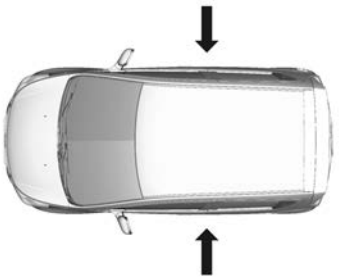
Front airbags will inflate in certain severe frontal or near frontal impacts. Front airbags are not designed to inflate if the vehicle is struck from the side, rear or in rollovers. Always wear a seat belt.

Side airbag system

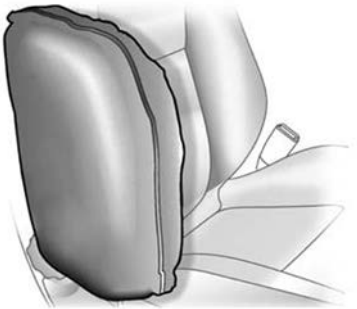


Side airbags are stored in the sides of the front seats.

They can be identified by the word **AIRBAG**.



The side airbags deploy in most, but not all severe side impacts.



The risk of injury to the upper body and pelvis in the event of a side impact is considerably reduced.

⚠Warning

Do not fit unauthorised seat covers as they may impair the deployment of the side airbags.

Do not position your body or any object (including pillows) between front seats and doors.

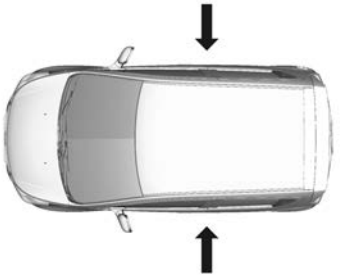
Do not lean on, or sleep against, the door. Always sit centrally in the seat.

Always wear a seat belt.

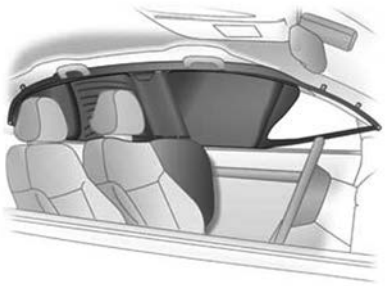
Curtain airbag system

Curtain airbags are stored in the roof on each side of the vehicle.

They can be identified by the word **AIRBAG** on the door pillars.



The curtain airbags deploy in most, but not all severe side impacts.



The risk of injury to the head in the event of a side impact is considerably reduced.

⚠Warning

Do not position your body or any object (including pillows) in the area in which the airbag inflates.

There must be no objects in the area in which the airbag inflates. Refer to the illustration.

Use the hooks above the doors only to hang up light articles of clothing.

Do not place any objects in the pockets of the hanging items.

Do not hold onto the assist grips (above the doors) while seated in the vehicle.

Do not lean on, or sleep against the front or rear doors. Always sit centrally in the seat.

Always wear a seat belt.

Replacing airbag system parts after a crash

Note

After an accident where airbags have deployed, the systems, associated parts and hardware must be checked and replaced as required.

Seats, associated parts and hardware must also be checked and replaced as required.

The airbag system should also be inspected after an accident if:

- The dashboard area or steering wheel is scratched, cracked or damaged.
- The front seats and upholstery are damaged.
- The headliner or trim panels are damaged.

It is recommended that this work be carried out by a Holden Dealer or approved repairer.

Child restraints

⚠Warning

WARNING – EXTREME HAZARD

Do not use a rearward facing child restraint on a seat protected by an airbag in front of it.

The child could be seriously injured if the airbag inflates, as the child's head would be very close to the inflating airbag.

Remember that it is safest for children to be seated in the rear seats.

Never carry a child while travelling in the vehicle.

⚠Warning

This manual provides you with general information concerning child restraints only.

The driver is required by law to ensure that passengers are suitably restrained. In most States and Territories of Australia and New Zealand, specific laws may exist which require children to be seated in approved child restraints.

Holden strongly recommends that you refer to your specific State or Territory regulations to determine which child restraint is suitable for your child.

⚠Warning

Always ensure that the seat belt fits firmly around the child restraint.

If a child cannot see out of the window, do not raise him/her by means of an ordinary cushion. It will not stay in place in a collision and the child can slip out of the straps and become entangled.

Selecting the right system

Infants

Rearward facing infant capsules are designed so that in the event of a collision, impact forces will be evenly spread over the baby's back, with minimal jarring to the vulnerable head and neck area.

Young children

Forward facing child seats are for use when the child is able to sit and easily hold their head upright.

Booster seats

Booster seats are for when children outgrow a typical forward facing child seat, but are still too small for three point seat belts.

Older children

A child should use a normal three point seat belt only when:

- They can sit against the back of the rear seat with knees bent comfortably at the edge of the seat.
- The lap belt rests low and snug across the hips, not across the stomach.
- The sash belt is centred on the shoulder and chest.
- They are able to stay seated like this for the entire trip.

Where to put the restraint

⚠Warning

Child restraint anchorages are designed to withstand only those loads imposed by correctly fitted child restraints. Under no circumstances are they to be used for adult seat belts, harnesses, or for attaching other items or equipment to the vehicle.

Only child restraints that have clips to attach to the vehicle's anchorage fittings are to be used. Earlier types of child restraints may not attach securely to this type of anchor.

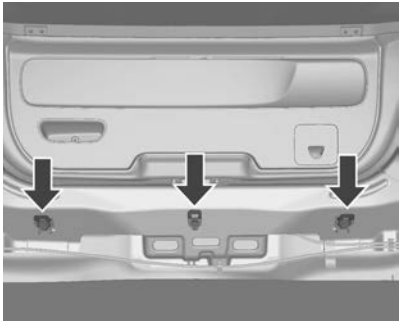
Use only Standards Australia and New Zealand approved child restraints and harnesses. Only purchase a child restraint which carries the appropriate Standards Australia sticker of approval.

Where legally allowable, you may install a forward-facing child restraint in the front seat, but always move the passengers seat as far back as it will go. The forward facing child restraint must still be attached to the passenger side child restraint anchorage point, located behind the rear seat.

Remember, it is safest for children to be seated in the rear seat.

Note
If unsure about installing a child restraint, contact an approved restraint fitting station or a Holden Dealer.

Top-tether child restraint systems



The child restraint tether anchors are located at the rear of the load compartment in line with the three rear seating positions.

Note
Use the child restraint anchors for their designed purpose only.

Child restraint installation

The vehicle has been designed to accommodate child restraints on the rear seat.

When using a child restraint, read the installation instructions supplied with the child restraint and follow the directions for fitment carefully.

The child restraint system should be secured in conjunction with the vehicle's seat belt.

Secure the child in the restraint in accordance with the manufacturer's instructions.

If unsure about installing a child restraint anchor fitting, contact an approved restraint fitting station or a Holden Dealer.

Storage

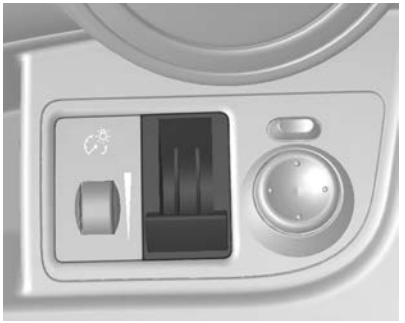
Storage compartments 40
Loading information 43

Storage compartments

Instrument panel storage

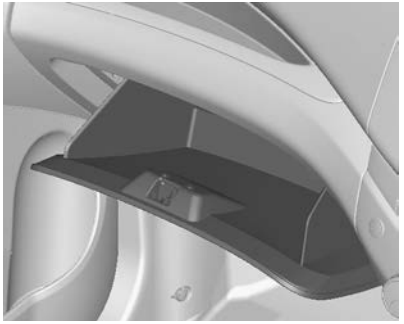
The instrument panel storage compartment is located in front of the shift lever.

Coin storage



The coin storage compartment is located on the driver side of the dashboard.

Glove box storage



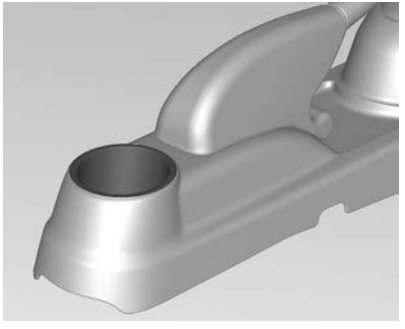
The glove box is located in the dashboard, in front of the passenger's seat.

To open, pull the handle towards you. To close, push the lid firmly back into place.

⚠Warning

To reduce the risk of injury, always keep the glove box door closed when driving.

Cup holders



Cup holders are located in the front console and rear of the centre console.

⚠Warning

To avoid scalding, never place hot drinks in the cup holders.

Do not place uncovered containers of liquid in the cup holder while the vehicle is in motion.

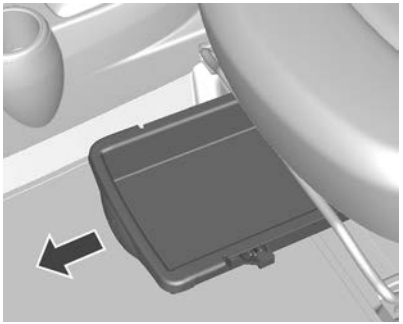
Sunglasses storage

The sunglasses holder is located in the roof on the driver side.

To open, fold downwards.

Note
Do not use for storing heavy objects.

Under seat storage



The vehicle may have under seat storage beneath the passenger's seat.

To open, pull up on the front of the tray and pull towards the front of the vehicle.

To close, push the tray towards the rear of the vehicle.

Load compartment

⚠Danger

Do not stack objects higher than the front seats.

Do not allow passengers to sit on the folded seatbacks while the vehicle is in motion. Serious injuries or death can result.

For folding down rear seatbacks, see Rear seats on page 27.

Loading information

- Place all heavy objects in the load compartment as far forward as possible.
- Secure objects to prevent from sliding.

  Movement of heavy objects in the load compartment may change the handling of the vehicle.
- Ensure the backrests are securely engaged.
- Ensure that all cargo is lower than the rear seat backrests.
- Place heavier objects at the bottom.
- Do not place any objects on the load compartment cover or the dashboard.
- Do not place unsecured objects in the interior.
- Do not drive with an open load compartment.

Instruments and controls

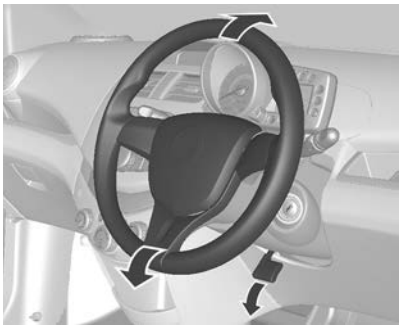
Controls 44
Setting the clock 47
Warning lights, gauges and indicators 48
Trip computer 55

Controls

Steering wheel adjustment

⚠Warning

Do not attempt to adjust the steering wheel while driving.



1. To unlock, move the lever down.
2. Adjust the steering wheel.
3. To lock, move the lever up.
4. Ensure the steering wheel is locked in position before driving.

Steering wheel controls

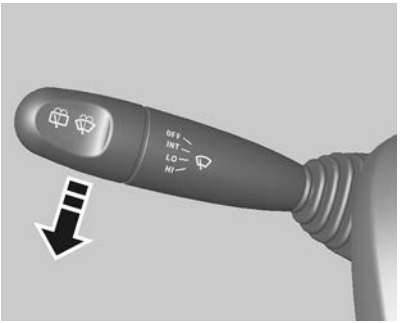
The infotainment system can be operated using the controls on the steering wheel. See Infotainment system on page 61.

Horn

Press .

Windscreen wiper/washer

Windscreen wiper



The wipers/washers operate with the ignition in the **ON** position.

Caution
Do not operate the wipers on dry glass or when covered with snow or ice, as this will damage the rubber and scratch the glass.

0FF Off

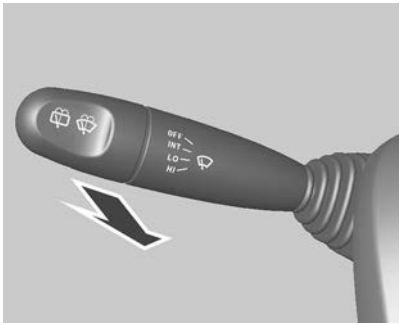
INT Intermittent wipe

LO Continuous slow speed

HI Continuous fast speed

Note Wipers cycle once while the lever is pushed down slightly and released.

Windscreen washer



Pull to wash the windscreen. Washer fluid is sprayed and the wipers cycle for a short time.

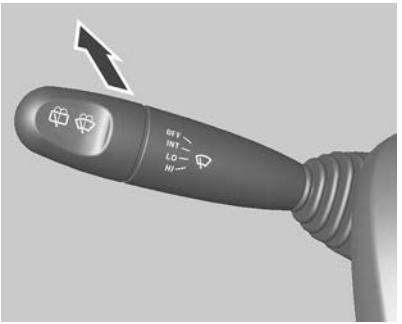
Caution

Do not operate the windscreen washer for more than a few seconds or when the washer fluid reservoir is empty.

⚠Warning

Do not spray washer fluid on the windscreen in freezing weather.

Rear window wiper/washer



- Push to the first stop for the rear window wiper.
- Push to the second stop to wash the rear window.

Caution

Do not operate the wipers on dry glass or when covered with snow or ice, as this will damage the rubber and scratch the glass.

Do not operate the windscreen washer for more than a few seconds, or when the washer fluid reservoir is empty.

Clock

To set the clock:

1. Push **CLOCK** for more than 1 second and release.

   The hour flashes.

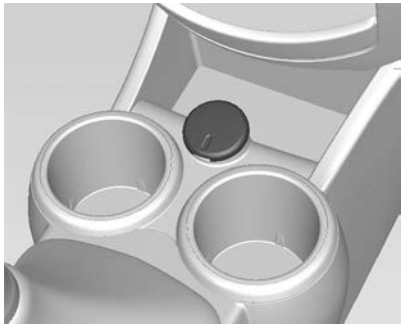
2. Push **CLOCK** to adjust the hour.

   After 2 seconds, the minutes flash.

3. Push **CLOCK** to adjust the minutes.

   The clock is set after a few seconds.

Power outlet



The power outlet is located in the front console.

The 12V outlet operates when the ignition is turned to the ON position.

- The power outlet does not operate if the battery voltage is low.
- Do not exceed the maximum power consumption of 120 watts.
- Do not connect electrical charging devices or batteries.

Warning lights, gauges and indicators

Speedometer

Shows vehicle speed in kilometres per hour (km/h).

Odometer

Shows distance travelled in kilometres.

Trip odometers **A** and **B** measure distances travelled since the trip odometer was reset:

- Press **TRIP** to switch displays.
- Press **TRIP** for more than 1 second to reset.

Tachometer

Shows engine speed in thousands of revolutions per minute (RPM).

Fuel gauge

Shows the level of fuel in the fuel tank (**E** = empty, **F =** full).

Movement of the fuel within the fuel tank may cause the fuel gauge indicator to move when braking, accelerating or turning.

⚠Danger

Before refuelling, stop the vehicle and switch the engine off.

Service display

Control indicators

The vehicle may have the following indicators.

Indicators illuminate for a short time when the ignition is turned on to show that the light is working.

Red: danger, important reminder

Yellow: warning, information, fault

Green: confirmation of activation

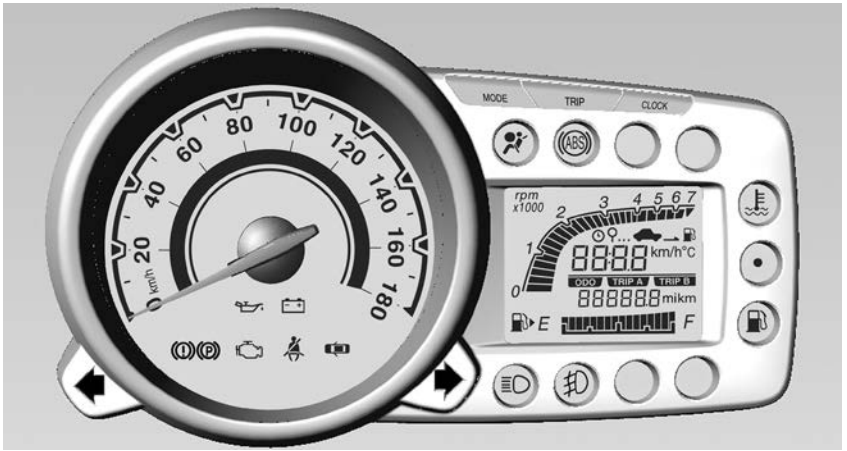
Blue: confirmation of activation

Note
Depending on vehicle variant, the instrument panel appearance may differ.

Information displays

Graphic Information Display (GID)

Instrument panel



Centre display

Turn signal

- Push the lever in the same direction the steering wheel is turned.
- ⇦⇨ flashes.

  ⇦⇨ also flashes when the hazard warning is activated.
- The turn signal will self cancel from larger turns.
- If ⇦⇨ flashes quickly, see Bulb replacement on page 99.

  See Fuses on page 106.

  See Turn and lane change signals on page 58.

Seat belt reminder

: Driver's seat belt reminder

$_2$: Front passenger's seat belt reminder (if occupied)

When the ignition is turned to the ON position:

- or $_2$ illuminates until the seat belt is fastened.

When the engine is running:

- or $_2$ flashes for 100 seconds then illuminates until the seat belt is fastened.

If the vehicle reaches a specific distance or speed and the seat belt is unfastened, or $_2$ will flash and the chime will sound for 100 seconds, or until the seat belt is fastened.

See Three point belt on page 30.

Airbag and belt tensioners

The warning light illuminates for a short time when the ignition is turned on to show that the light is working.

If the warning light does not illuminate, does not extinguish after few seconds or illuminates while driving, there is a problem with the airbag or belt tensioner system.

⚠Warning

Have any fault in the airbag or belt tensioner system repaired immediately by a Holden Dealer.

See Airbag system on page 32.

See Belt tensioners on page 29.

Charging system light

The warning light illuminates for a short time when the ignition is turned on to show that the light is working.

If the warning light illuminates while the engine is running, there is a problem with the charging system:

1. Stop and switch off the engine.
2. Contact a Holden Dealer.

Malfunction indicator light

The warning light illuminates for a short time when the ignition is turned on to show that the light is working.

If the warning light illuminates while driving, there is a problem with the emission monitoring system. Contact a Holden Dealer.

Brake system warning light

The warning lights illuminate for a short time when the ignition is turned on to show that the lights are working.

If the warning lights do not extinguish or illuminate while driving and the park brake is released, there is a problem with the brakes:

- Stop the vehicle as soon as it is safe to do so.
- Check the brake fluid level. See Brake fluid on page 97. See Park brake on page 82.
- Do not proceed until satisfied that braking is possible or that the cause of the problem has been repaired.
- If necessary contact a Holden Dealer.

⚠Warning

Do not drive while the brake system warning light is on.

Antilock Brake System (ABS) warning light

The warning light illuminates for a short time when the ignition is turned on to show that the light is working.

If the warning light illuminates, there is a problem in the ABS.

Note

The vehicle's brake system remains operational but without ABS assistance. See Antilock Brake System (ABS) on page 81.

Contact a Holden Dealer.

High beam light

The ≡D indicator light illuminates when headlamp high beam is on. See High/low beam on page 57.

Fog lamp light

The ≠D indicator light illuminates when the fog lamps are on. See Front fog lamps on page 59.

Door ajar light

The warning light illuminates when any of the doors or the tailgate are not completely closed.

Vehicle messages

Engine temperature warning light

The warning light illuminates for a short time when the ignition is turned on to show that the light is working.

If the warning light illuminates, the engine coolant is excessively hot:

- Stop the vehicle as soon as it is safe to do so.
- Let the engine idle for a few minutes.
- If the warning light does not extinguish, switch the engine off and contact a Holden Dealer.

Engine oil pressure light

The warning light illuminates for a short time when the ignition is turned on to show that the light is working.

If the warning light illuminates while the engine is running, the engine oil pressure or level is low:

- Stop the vehicle as soon as it is safe to do so.
- Turn the ignition off and remove the key.
- Check the engine oil level. See Engine oil on page 93.
- If necessary, contact a Holden Dealer.

Caution
Engine damage may result if you keep driving. Do not run the engine. If the oil level is normal, have the system checked by the nearest Holden Dealer.

Low fuel warning light

The ⛽ illuminates when the fuel level is low:

Caution
To avoid damage to the catalytic converter, fill the fuel tank above the low fuel level.

See Catalytic converter on page 79.

Electronic Stability Control (ESC) indicator light

The warning light illuminates for a short time when the ignition is turned on to show that the light is working.

If the illuminates:

- There is a problem with the ESC.
- The ESC is no longer operating.
- Contact a Holden Dealer.

See Electronic Stability Control (ESC) on page 82.

If the flashes:

- The ESC is helping the vehicle with road grip and stability.
- The ESC alters engine power and/or braking on specific wheels, improving the vehicle's steering control and power delivery, on wet or slippery roads, particularly on snow and ice.

Electronic Stability Control (ESC) off light

The OFF warning light illuminates for a short time when the ignition is turned on to show that the light is working.

The OFF illuminates when the ESC system is deactivated.

Trip computer

Each time **MODE** is pressed, the trip computer displays changes in the following sequence:

1. Driving distance for remaining fuel
2. Average speed
3. Driving time
4. Ambient temperature

Whenever the ignition is turned on, the last selected mode will be displayed.

Driving distance for remaining fuel

- Estimates driving distance to an empty fuel tank from the current fuel level.
- Estimates are calculated when the fuel tank contains four litres or more of fuel.
- When the distance to empty is less than 50 km, --- flashes.

The driving distance for remaining fuel may differ depending on the:

- Driving conditions
- Driving pattern
- Vehicle speed

Average speed

- Shows the average speed of the vehicle.
- To reset the average speed to zero, press **MODE** for more than 1 second.

Driving time

- Shows the total drive time.
- To reset the driving time to zero, press **MODE** for more than 1 second.
- Driving time is calculated while the engine is turned on.
- The display will revert to 0:00 after 99:59 is displayed.

Ambient temperature

- Shows the outside temperature.
- A temperature range between –30 and 70°C is displayed.
- The ambient temperature adjusts after a short time delay.
- The ambient temperature may alter depending on driving conditions.

Lighting

Exterior lighting 57
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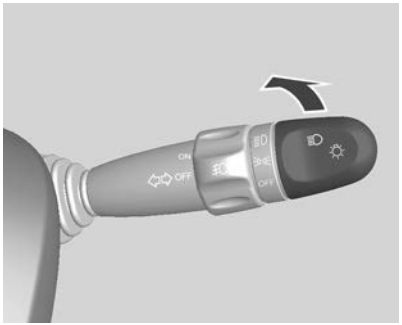
Lighting features 60

Exterior lighting

Lamp control



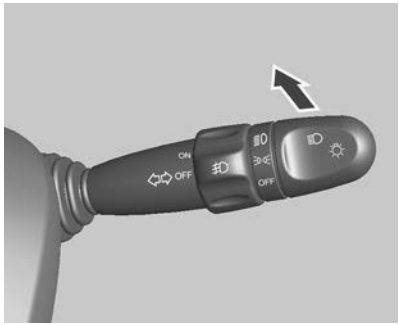
OFF: Turns all lamps and lights off.

(Park lamps): Turns on the park lamps, number plate lamps and instrument panel lighting.

(Headlamps): Turns on the headlamps and all park lamps, when the ignition is turned on.

The headlamps turn off automatically when the ignition key is turned to the LOCK position and the driver's door is opened.

High/low beam



To activate high beam:

1. Turn the headlamps on.
2. Push the lever forwards.

   The high beam indicator lamp illuminates on the instrument panel.

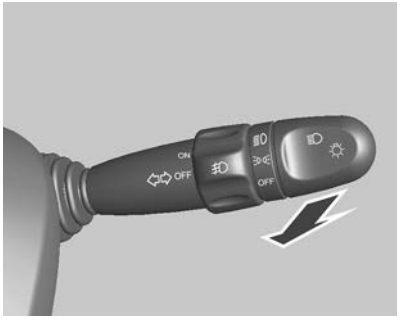
To return to low beam:

1. Pull the lever rearwards.

⚠Warning

Always switch the headlamps to low beam when vehicles are approaching or when following another vehicle.

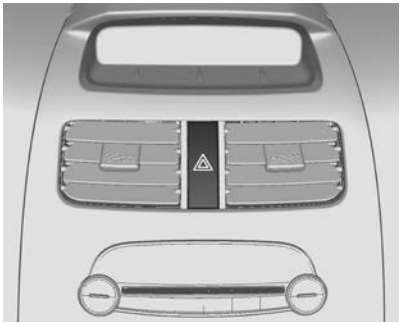
To flash the high beam lamps:



1. Turn the ignition on.
2. Pull the lever towards the rear of the vehicle and release.

   The lamps stay on for as long as the lever is held.

Hazard warning flashers



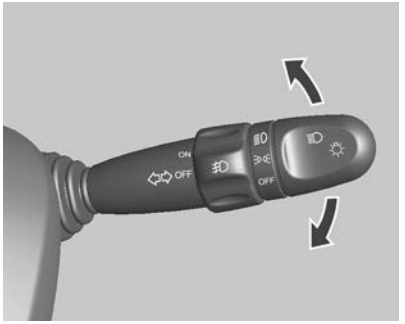
Press ⚠ to turn the hazard warning flasher on or off, when the ignition is in any position.

All turn signals flash continuously.

Use the hazard warning flasher if the vehicle becomes a traffic hazard, day or night.

Note
Using hazard warning flashers while the vehicle is moving, is illegal in some States and Countries.

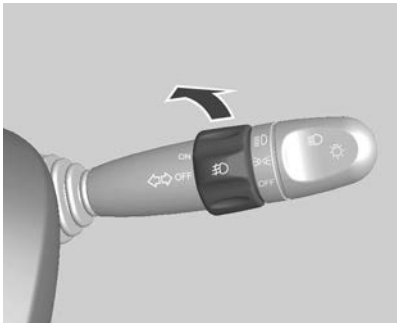
Turn and lane change signals



1. Push the lever in the direction the steering wheel is turned.

   A green arrow on the instrument panel flashes when the lamps are in operation.

Front fog lamps



1. Turn the headlamps/ parklamps on.
2. Rotate the switch towards the front of the vehicle to the **ON** position.

To turn the front fog lamps off, either:

1. Rotate the switch towards the rear of the vehicle to the **OFF** position.
2. Turn the headlamps/parklamps off.

Reversing lamps

The reversing lamps illuminate when the ignition is on and reverse gear is engaged.

Interior lighting

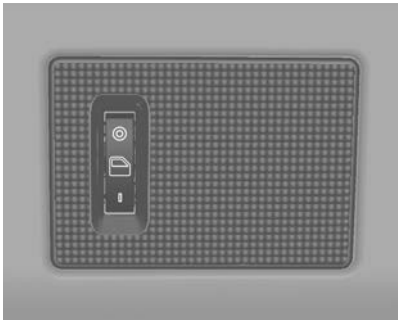
Instrument panel illumination

1. Turn the headlamps on.
2. Rotate and hold the switch until the desired brightness level is reached.

Load compartment lamp

The load compartment lamp illuminates when the tailgate is opened.

Courtesy lamp



Three settings are available:

- ⦾ **(On)**
- **(Door activated)**: The lamp automatically switches on when a door is opened and switches off when doors are closed.
- **I (Off)**

Note
To prevent the battery from discharging, turn the lamp off when the engine is not running.

⚠Warning

Do not leave the courtesy lamp on while driving in the dark.

Lighting features

Battery saver

To prevent the battery from discharging, lamps are switched off automatically after the key is turned to the LOCK or ACC positions and the driver's door is opened.

Note
This function does not apply to the courtesy lamps.

Infotainment system

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CD player 66
Auxiliary devices 69
USB/iPod® port 69

Introduction

General information

Do the following before driving:

- Read the infotainment system section to become familiar with the functions.
- Set up the audio by presetting favourite stations, setting the tone and adjusting the speaker settings.

About the system

⚠Warning

When driving the vehicle, be sure to keep the volume of the unit set low enough to hear sounds from outside the vehicle (e.g. road and traffic conditions).

Caution

Do not place beverages close to the audio system.

Do not strike or allow anything to impact the audio system.

Damage to the system mechanisms could occur.

Theft-deterrent feature

The audio system is protected by a security code.

Keep the identification card with the security code in a safe place, not in the vehicle.

The system activates immediately if the audio is disconnected from the battery.

Unlock the audio system with the security code before use.

If CODE flashes on the screen:

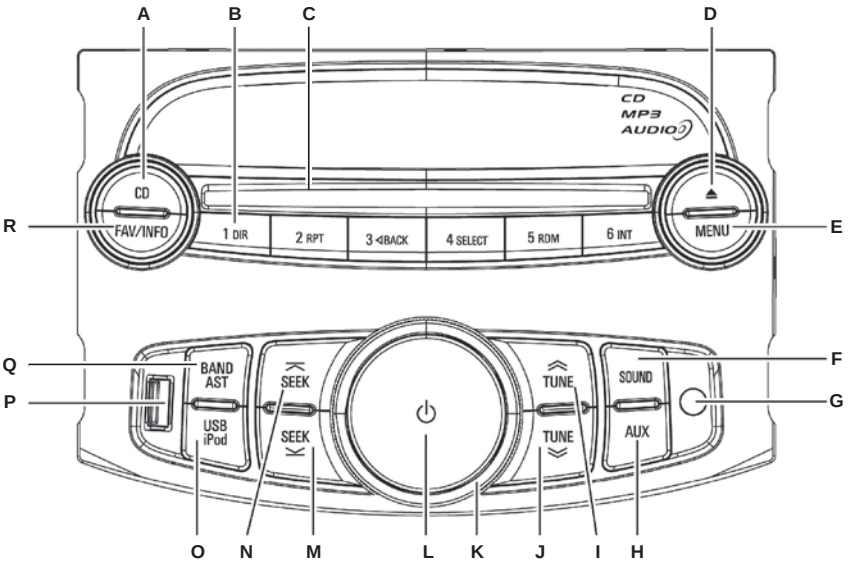
1. Turn the ignition key to the ON or ACC positions.
2. Press ⏻ (L) to turn the audio system on.

   CODE flashes.
3. Enter the four digit security code using the preset buttons (B).

   If the code is entered incorrectly, **CODE** is displayed.

   Repeat Steps 1 to 3.

Overview



A. CD select and pause button
B. Preset buttons 1 to 6 (radio, CD, USB, iPod®)
C. CD slot
D. CD eject button
E. Menu button (radio, iPod®)
F. Sound button
G. Auxiliary socket
H. Auxiliary mode selection button
I. Tune up button (radio, CD, USB, iPod®)
J. Tune down button (radio, CD, USB, iPod®)
K. Volume and tone switch
L. Power/mute button
M. Seek down button (radio, CD, USB)
N. Seek up button (radio, CD, USB)
O. USB/iPod® select and pause button
P. USB/iPod® port
Q. Band selection button (radio)
R. Favourite selection button (radio) Information display button (CD, USB, iPod®)

Steering wheel remote controls

Power:

- Press **PWR** to turn the power on.
- Press **PWR** for more than 1 second to turn the power off.

Mute:

- Press **PWR** when the power is on.

Volume:

From behind the steering wheel, press:

- **+** to increase the volume.
- **–** to decrease the volume.

Next radio station:

- Press **SEEK** for the next preset station. See Favourite memory preset on page 65.
- Press **SEEK** more than 1 second to search for the next station.

Next track:

- Press **SEEK** to go to the next track.
- Press **SEEK for** more than 1 second to fast forward a track.

Mode:

- Press **MODE** to select another audio source.
- The mode changes in the following order when:
  - A CD is inserted
  - A USB device is connected
  - An iPod® is connected
  - An auxiliary device is connected

  FM → AM → CD → USB or iPod® → AUX →

Operation

Power on/off

- Press ⏻ (L) to turn the audio system on.
- Press for more than 1 second to turn the audio system off.

Mute

- Press ⏻ (L) briefly to mute the audio system.

Volume

- Rotate ⏻ (K) to adjust the volume.

Audio adjustment

Bass/tone

1. Press **SOUND** (F) repeatedly until **BAS** is displayed.
2. Rotate ⏻ (K) to increase or decrease the bass.

Treble

1. Press **SOUND** (F) repeatedly until **TRE** is displayed.
2. Rotate ⏻ (K) to increase or decrease the treble.

Balance

1. Press **SOUND** (F) repeatedly until **BAL** is displayed.
2. Rotate ⏻ (K) to adjust the sound balance between left and right speakers.

Fader

1. Press **SOUND** (F) repeatedly until **FAD FRONT** or **FAD REAR** is displayed.
2. Rotate ⏻ (K) to adjust the sound between front and rear speakers.

Preset EQ selection

1. Press **SOUND** (F) repeatedly until the current equaliser setting is displayed.
2. Rotate ⏻ (K) to make a selection: EQ OFF → POP → ROCK → COUNTRY → VOICE → JAZZ → CLASSIC →

Radio

AM-FM radio

Radio mode selection

1. Press **BAND/AST** (Q) to select radio from another mode.
2. Press **BAND/AST** (Q) briefly to select between AM and FM stations.
3. Press **BAND/AST** (Q) for more than 1 second to search and store stations. See Autostore function on page 65.

Manual tune up/down

1. Press or press and hold ⌃ (I) or ⌄ (J) to choose a frequency.

Seek up/down

Press ⌃ (N) or ⌄ (M) briefly to find the next/previous station automatically.

Favourite memory preset

Store up to six favourite pages and up to 48, AM or FM stations:

1. Select a station.
2. Press **FAV/INFO** (R).
3. Press and hold a preset 1-6 (B) for more than 1 second.

   A chime sounds.

Recall favourite preset

Listen to a stored station in the favourite preset memory:

1. Press **FAV/INFO** (R) to select a page.
2. Press a preset 1-6 (B).

Autostore function

Scan the entire band, select 12 stations with the best reception quality and store them in the autostore list.

1. Press **BAND/AST** (Q) for more than 1 second.

Delete autostore page

1. Press **FAV/INFO** (R) until a beep is heard.
2. Press **FAV/INFO** (R) until **AST.Page** is displayed.
3. Rotate ⏻ (K) until **AST.Page On** or **AST.Page Off** is displayed.

Selecting a favourite page

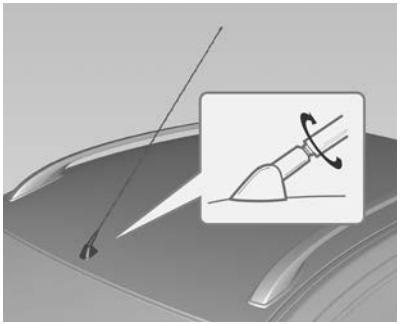
1. Press **FAV/INFO** (R) until a beep is heard.
2. Press **FAV/INFO** (R) until **FAV.Page** is displayed.
3. Rotate ⏻ (K) to select visible pages.

Radio reception

Frequency interference, static, noise, distortion or loss of reception can occur during normal radio reception due to:

- Distance from the transmitter
- Multipath signals
- Blocking of signals

Fixed mast antenna



- To remove the roof antenna, rotate anticlockwise.
- To install the roof antenna, rotate clockwise and tighten.

Caution
Remove the antenna before entering an area with a low ceiling or an automatic car wash. Damage may occur to the antenna or the roof panel.

CD player

General information

Caution
If a label is added to a CD, or more than one CD is inserted into the slot at a time or an attempt is made to play scratched or damaged CDs, the CD player could be damaged. Use only CDs in good condition without any labels, load one CD only and keep the CD player and the loading slot free of foreign materials, liquids and debris.

If a description label is required, write on the top of the CD with a CD marking pen.

CD-R format

Sound quality may be reduced due to:

Caution

Avoid inserting any foreign objects into the slot of the player.

Failure to observe this may cause malfunction.

- Method of recording
- Recording quality
- CD handling

Handling CDs

- Avoid leaving fingerprints on the CD when removing it.
- Store any CDs in their protective covers.
- Ensure that CDs are clean and dry before inserting.
- Protect CDs from heat and direct sunlight.

Audio system care

Do not clean using cleaning fluid, alcohol or other solvents. Use only a damp cloth.

Playing a CD

When a CD is in the player, it will:

- Remain in the player when the ignition or the audio system is turned off.
- Begin playback where it stopped if it was the last selected audio source.

Disc insert

1. Insert a CD into the CD slot (C) with the label facing up.

   The CD is pulled into the slot automatically.

   FILE CHECK appears on the display.

   Once playback begins, the track and track number appear on the display.

CD mode selection

To select CD mode, do one of the following:

- Insert a CD into the CD slot (C).
- With a CD in the player, press **CD** (A), when in a different mode.

CD eject

1. Press ⏏ (D).

   The disc is ejected.
2. Remove the disk.

Pause

1. Press **CD** (A) while a CD is playing.

   PAUSE flashes.
2. Press **CD** (A) again to begin playback.

Next/previous track

1. Press ⏫ (I) or ⏬ (J).

Fast forward/fast reverse

1. Press and hold ⏫ (I) or ⏬ (J).

Next/previous folder (MP3/WMA)

1. Press ⏫ (N) or ⏬ (M).

Repeat

1. Press **2 RPT** (B).

   The current track is repeated.
2. To cancel, press **2 RPT** (B) again.

Random

1. Press **3 RDM** (B).

   Tracks are played randomly.
2. To cancel, press **3 RDM** (B) again.

Intro scan

1. Press **4 INT** (B).

   Ten seconds of each track are played.
2. To cancel, press **4 INT** (B) again.

All/directory mode (MP3/WMA)

Repeat, intro-scan and random functions operate in the current folder when DIR is displayed:

1. Press **1 DIR** (B).

   The audio system operates in directory mode.
2. To cancel, press **1 DIR** (B) again.

ID3 tag information display (MP3/WMA)

1. Press **FAV/INFO** (R).

   ID3 tag information for the current files is displayed.

Auxiliary devices

General information

- Devices such as USB sticks and MP3 players are able to be connected to the audio system.
- Connect using either the 3.5 mm auxiliary socket (G) or the USB port/iPod® (P). For operation, see USB/iPod® port on page 69.

Selecting auxiliary as source:

1. Connect a device to the socket (G).
2. Press **AUX** (H) to select auxiliary mode.

USB/iPod® port

General information

A USB stick or iPod® can be connected to the USB/iPod® port.

⚠Warning

Do not connect devices such as; hard discs, multi plug USB hubs or other digital equipment to the USB/iPod® port.

Connecting other devices can cause malfunction or destroy the audio equipment.

Do not use any equipment that prevents safe driving.

Caution

In rare cases, a USB stick (thumb drive) may not be recognised by the system or may cause a malfunction.

Selecting the USB/iPod® as source

1. Connect a USB stick or iPod® to the USB/iPod port (P).

   Files play automatically.
2. To remove a USB stick or iPod®, pull out of the USB/iPod port (P).

   The previously used source will be selected.

USB/iPod® mode selection

To select USB or iPod® mode, do one of the following:

- Connect a USB stick or iPod® to the USB/iPod port (P).
- With a USB stick or iPod® connected, press **USB/iPod** (O), when in a different mode.

iPod® navigation

1. Connect an iPod® to the USB/ iPod port (P).
2. Press **MENU** (E).
3. Press ⌃ (I) or ⌄ (J) to navigate through files.
4. Press **4 SELECT** (B).

To return to a previous step:

1. Press **3** ◁**BACK** (B).

Pause

1. Press **USB/iPod** (O) while a USB stick or iPod® is playing.

   PAUSE flashes.
2. Press **USB/iPod** (O) again to begin playback.

Next/previous track

1. Press ⌃ (I) or ⌄ (J).

Fast forward/fast reverse

1. Press and hold ⌃ (I) or ⌄ (J).

Next/previous folder

1. Press ⌃ (N) or ⌄ (M).

Repeat

1. Press **2 RPT** (B).

   The current track is repeated.
2. To cancel, press **2 RPT** (B) again.

Random

1. Press **3 RDM** (B).

   Tracks are played randomly.
2. To cancel, press **3 RDM** (B) again.

Intro scan

1. Press **4 INT** (B).

   Ten seconds of each track are played.
2. To cancel, press **4 INT** (B) again.

All/directory mode (MP3/WMA)

Repeat, intro-scan and random functions operate in the current folder when DIR is displayed:

1. Press **1 DIR**.

   The audio system operates in directory mode.

To cancel this function:

1. Press **1 DIR** again.

ID3 tag information display

1. Press **FAV/INFO** (R).

   ID3 tag information for the current files is displayed.

Climate control

Air conditioning system..... 71
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Air conditioning system

⚠Danger

Do not sleep with the air conditioning or heating system on.

Serious harm or death may occur due to a drop in oxygen level and/or body temperature.

Controls

- Air recirculation
- Temperature
- Heated rear window
- Air distribution
- Demisting
- Defrosting
- Cooling
- Fan speed

Temperature

Rotate the temperature switch:

Red: warm

Blue: cold

Mode

Select an air outlet by rotating the switch. Air is directed:

- : To the dashboard vents.
- : To the dashboard vents and floor vents.
- : To the floor vents. A small amount of air is directed to the windscreen, outer dashboard vents and side window demist vents.
- : Between the windscreen and floor vents, some to the outer dashboard vents and side window demist vents.
- : To the windscreen and side window demist vents, with a small amount of the air to the outer dashboard vents.

Fan

Rotate the fan speed switch to the desired speed, between **0** and **4**.

Recirculation

Slide the recirculation switch to for recirculated air or to for outside air.

Note

- Recirculation reuses interior air so is not recommended for long periods of time.
- Do not use recirculation if occupants are smoking.

Air conditioning

1. Turn the ignition on.
2. Press .

   The light in the button illuminates.
3. Rotate the temperature switch to within the blue zone.
4. Rotate the mode switch to select an air outlet.
5. Adjust the angle of the air vents.
6. Rotate the fan speed switch to the desired speed.

Note

- To conserve fuel, the air conditioning can be switched off in cold weather.
- Warm air will be directed to the air outlets if the temperature switch is in the red zone, even when is pressed.
- Have any faults repaired by a Holden Dealer.

Maximum cooling

Use maximum cooling for quick cooling of the passenger compartment.

1. Turn the ignition on.
2. Press ☼.
   The light in the button illuminates.
3. Slide the recirculation switch to ⛍.
4. Rotate the temperature switch to cold air.
5. Rotate the mode switch to ⍀ or ⍀.
6. Adjust the angle of the air vents.
7. Rotate the fan speed switch ✣ to **4**.

Windscreen demister

1. Slide the recirculation switch to ⛍.
2. Rotate the temperature switch to the desired temperature.
3. Rotate the mode switch to ⍀.
4. Push ☼.
   The light in the button illuminates.
5. Rotate the fan speed switch ✣ to the desired speed.

Off

Rotate the fan speed switch ✣ to **0** to switch off all heating, ventilation and cooling.

Rear window demister

1. Turn the ignition key to the ON position.
2. Press to switch on or off.

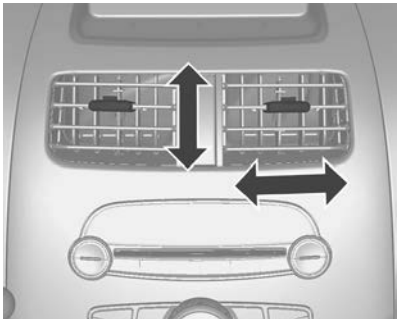
   Heating is switched off automatically after approximately 16 minutes.

   Note
   Whenever the rear window demister is switched on, the rear view mirror heaters turn on.

Caution
Do not use sharp objects or abrasive window cleaners on the rear window. Do not scratch or damage the wires when cleaning.

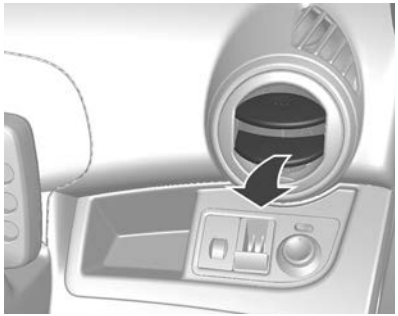
Air vents

Adjustable air vents



Direct the air flow by tilting the vents.

Note
At least one air vent must be open while the air conditioning is on.



1. To open, press in the cover.
2. Rotate the vent to the desired direction.
3. To close, press the cover.

⚠Warning

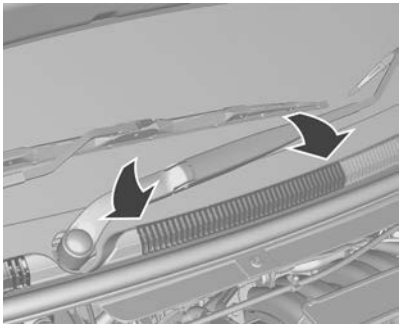
Do not attach objects to the vents. Damage or injury may occur.

Fixed air vents

Fixed air vents are located beneath the windscreen, front door windows and in the footwells.

Maintenance

Air intake



Outside air is drawn into the vehicle through the opening between the bonnet and the windscreen.

Keep the area clear of debris.

Pollen/dust filter

The passenger compartment air filter filters contaminants such as pollen and dust from entering the vehicle.

Caution

Have the passenger compartment air filter replaced if driving frequently on dusty and unpaved roads or polluted areas.

Regular operation

Switch air conditioning on for at least 5 to 10 minutes once every two weeks to lubricate the system, even in winter.

Water

Water condensation can leave traces of clear water on the ground underneath the vehicle.

Service

Have the air conditioning serviced at the frequency shown in the Maintenance schedule, in the Service/Warranty Booklet.

Driving and operating

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Driving information

Before entering the vehicle

Check that windows, mirrors and lamps are clean.

Visually check tyre inflation. Check tyre pressures weekly.

Before driving off

1. Close and secure all doors.
2. Position the seat for comfortable driving.
3. Adjust rear view mirrors.
4. Fasten seat belts.
5. Check that warning indicators illuminate when turning the ignition on. See Warning lights, gauges and indicators on page 48.

Starting and operating

New vehicle running-in

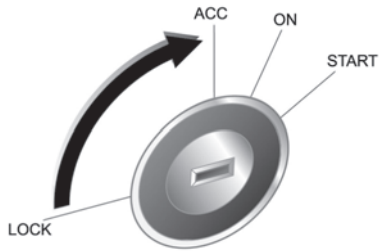
Use the following precautions to improve performance:

- Do not make full throttle starts.
- Avoid downshifting to brake or slow the vehicle.
- Avoid hard stops except in emergencies to avoid premature wear and early replacement of brakes.
- Avoid heavy acceleration and prolonged highspeed driving to avoid damage to the engine and to conserve fuel.

Brakes

- Do not let the vehicle run down hills, or coast with the engine off, as the power assistance does not operate.
- Ensure that there are no obstructions which could limit brake pedal use.
- Continuous or heavy use of brakes will shorten the life of the brake pads.

Ignition positions



⚠Warning

Do not turn the engine off while the vehicle is moving as there will not be any power assist for brakes or steering.

Never remove the key while the vehicle is moving, as this will lock the steering.

LOCK: When the key is in this position, some electrical accessories and the engine are off.

The key can only be inserted and removed from this position.

The engine is automatically disabled shortly after removing the key from the ignition.

The steering wheel is automatically locked when the key is removed.

To release the steering lock, re-insert the key and turn it towards the front of the vehicle. If still locked, turn the steering wheel slightly to the right or left while turning the key towards the front of the vehicle.

ACC**:** When the key is in this position, the audio system operates.

ON: When the key is in this position, the engine is ready to start and all electrical systems are active.

Warning lamps will illuminate. See Warning lights, gauges and indicators on page 48.

Do not leave the switch in the ON position for a long time, unless the engine is running, otherwise the vehicle's battery will discharge.

START: Turn the key to this position and release when the engine is running.

Starting the engine

1. Apply the park brake firmly.
2. Push the clutch pedal to the floor.
3. Move the shift lever to the neutral position.
4. Start the engine.

   The engine starts automatically.

   The key automatically returns to the ON position.
5. Release the clutch pedal slowly.

Notes

- Do not depress the accelerator pedal while starting the engine.
- Do not subject the engine to full throttle acceleration or high speeds until it has reached normal operating temperature. Premature engine wear or damage may result.

Parking

1. Apply the park brake.
2. If facing uphill or on flat ground, select 1st gear. If facing downhill, select reverse gear.
3. Shut all windows.
4. Turn the ignition off and remove the key.
5. Press on the key to lock all doors. See Keys and locks on page 14.

⚠Warning

Be careful where you park or drive. As with any vehicle, do not park or operate the vehicle in areas where combustible materials such as dry grass or leaves can come in contact with a hot exhaust system.

Exhaust gases are hazardous, especially if they concentrate in closed rooms.

Never leave the engine running in an enclosed space such as a closed garage or underground car park.

Engine exhaust

Catalytic converter

The catalytic converter reduces the amount of harmful substances in the exhaust gas.

Caution

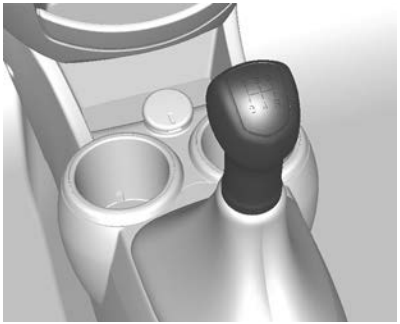
Use of low quality fuel or fuel with too low an octane number may damage the engine, the catalytic converter or electronic components.

Unburnt petrol will overheat and damage the catalytic converter. Therefore avoid excessive use of the starter, running the fuel tank dry and starting the engine by pushing or towing.

If the engine misfires, runs unevenly, engine performance is reduced or other problems occur, contact a Holden Dealer as soon as possible.

In an emergency, drive for a short period, keeping the vehicle and engine speed low.

Manual transmission



- When shifting from one gear to another, push the clutch pedal to the floor.
- Do not engage reverse gear while the vehicle is still moving.
- Pause between pressing the clutch pedal and moving into reverse gear.
- Whenever reverse gear is selected with the ignition on, the reverse lamps illuminate.
- Do not drive with your foot resting on the clutch pedal.
- When stopped on an incline, do not hold the vehicle stationary using the clutch. Use the park brake or foot brake.
- Shift to a lower gear when climbing steep grades, before the engine starts to labour.
- Shift to a lower gear before descending steep grades.
- Do not over rev the engine when shifting to a lower gear.

Brakes

The brake system comprises two independent brake circuits.

If one brake circuit fails, the vehicle can still be braked using the other brake circuit. However, braking effect is achieved only when the brake pedal is depressed firmly. Considerably more force is needed for this. The braking distance is extended. Contact a Holden Dealer.

⚠Warning

After driving through deep water, washing the vehicle or using the brakes excessively such as when descending a steep hill, the brakes can temporarily lose their stopping power. This may be due to wet brake components or overheating.

Shift to a lower gear when going down hills. Do not continuously apply the brakes.

To dry out the brakes:

- Ensure there is a clear area ahead.
- Lightly apply the brakes.
- Maintain a slow forward speed until performance returns to normal.

Antilock Brake System (ABS)

The ABS:

- Continuously monitors the vehicle's braking system preventing the wheels from locking up.
- Allows maximum braking effort while full steering control is retained, even in the event of panic braking.

⚠Warning

Do not let this special safety feature tempt you into taking risks when driving. Traffic safety can only be achieved by adopting a responsible driving style. You should always adjust the vehicle's speed to suit road and traffic conditions. Always maintain an adequate distance to the vehicle in front of you.

Operation

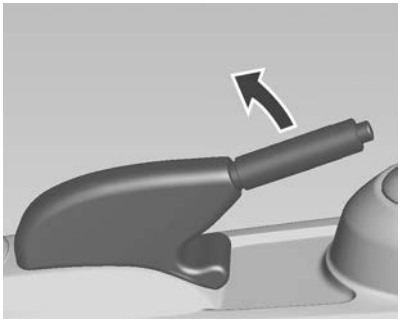
ABS operation is noticeable by pulsing of the brake pedal and the noise of the regulation process.

Keep the brake pedal fully pressed throughout the braking process, without pumping it.

Caution

If there is a malfunction with the ABS, the vehicle's brake system remains operational, but without ABS assistance. Have a Holden Dealer check the system as soon as possible.

Park brake



Applying the park brake:

1. Pull the lever straight up, without pressing the release button.

Releasing the park brake:

1. Pull the lever slightly upwards.
2. Push in the release button on the top of the lever and lower the lever all the way down.

⚠Warning

Never drive the vehicle with the park brake applied.

Ride control systems

Electronic Stability Control (ESC)

The ESC:

- Improves driving stability in any driving situation.
- Assists in maintaining vehicle stability when the vehicle's grip level is exceeded such as a sudden lane change, slippery or unexpected road conditions.
- Alters engine power and/or braking on specific wheels, improving the vehicle's steering control and power delivery, on wet or slippery roads, particularly on snow and ice.

⚠Warning

Do not let this special safety feature tempt you into taking risks when driving. Traffic safety can only be achieved by adopting a responsible driving style. The vehicle's speed should always be adjusted to suit road and traffic conditions.

Activation

- The ESC is automatically switched on each time the engine is started.
- The ESC is operational as soon as 🚘 extinguishes.
- 🚘 flashes on the instrument panel while the ESC is actively helping the vehicle with road grip and stability.

Deactivation

In certain circumstances, it may be helpful to disable the ESC, e.g. on steep gravel inclines, or if the vehicle is bogged. It may be possible to get more traction from a slightly spinning wheel:

1. Press .

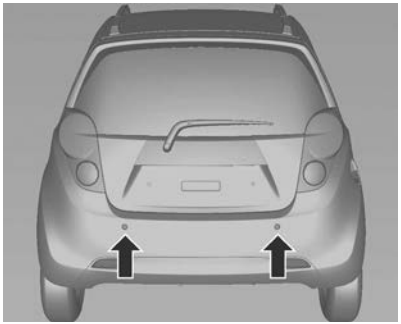
   illuminates on the instrument panel.

   The ESC is reactivated by pressing again.

Object detection systems

Park Assist (PA)

The vehicle may have Park Assist (PA).



This system is able to detect obstacles at the rear of the vehicle when reversing.

⚠Warning

The driver is always responsible for taking care and attention while manoeuvring the vehicle. The PA is only an aid and is neither intended to, nor able to take over any responsibility.

The park sensors may not be able to detect all objects under every condition e.g. objects too close to the vehicle, objects above or below the sensors, or objects with a surface that absorbs ultrasonic waves. Additionally, some ambient conditions like ultrasonic waves or heavy rain can cause disruptive reflections from an object's surface. Such objects may not be detected.

Always manoeuvre the vehicle slowly to allow yourself sufficient time to react. The warning tones will sound only while the vehicle's speed is below 5 km/h.

Operation

The PA is activated automatically when the following occur:

- The ignition is turned on.
- The reverse gear is selected.

  A short tone from the rear speaker sounds to confirm that the rear sensors are operational.

The PA is deactivated when the vehicle's speed is greater than approximately 5 km/h.

When an object is detected:

- A warning tone sounds.
- As the distance decreases, the repetition rate of the tone increases.
- At a distance of about 20-40 cm, the warning tone sounds continuously.

Alarm	Sensing distance	Alarm sound
1st alarm	approximately 0.8-1.5m from the rear bumper	--beep--beep--
2nd alarm	approximately within 80cm from the rear bumper	--beep beep beep beep
3rd alarm	approximately 20-40cm from the rear bumper	Alarm stays on

- Keep bumper sensors free from dirt, scratches, grime, ice, frost and snow with a soft cloth.
- If the alarm sounds continuously, three times when there are no obstacles near the rear bumper, contact a Holden Dealer.
- If the sensors receive other ultrasonic signals, e.g. metallic sounds or exhaust brake noise from heavy commercial vehicles, the PA may not work properly.
- Do not impact or shock the sensors by hitting or directing a high pressure water cleaner directly at them while washing, as the sensors may become damaged.
- The PA may not operate correctly when the vehicle is driven over uneven surfaces.
- The PA may not recognise sharp objects, thick winter clothes or other materials which absorb ultrasonic waves.

Fuel

⚠Danger

EXHAUST WARNING – CARBON MONOXIDE POISONING

Exhaust gases can produce carbon monoxide, a dangerous gas, which can cause unconsciousness and even death to both humans and animals.

Gases could be inhaled if the exhaust system on your vehicle is faulty.

To protect against exhaust gases entering the vehicle, the exhaust system and body should be inspected:

- Each time the vehicle is serviced.
- Whenever a change is noticed in the sound of the exhaust system.
- Whenever the exhaust system, underbody or rear of the vehicle is damaged.

Take the vehicle to a Holden Dealer if you think the vehicle needs inspecting for any of the above reasons.

Do not sit (or leave children or pets) in a parked vehicle for any extended period of time with the engine running. Do not run the engine in an enclosed area (such as the garage) any longer than is needed to move the vehicle.

Driving with the tailgate open is not recommended. If you must travel with the tailgate open, close all windows, ensure that the heater controls are set to outside (rather than recirculate) with air directed to the face and the fan on the highest speed. Do not exceed 50 km/h.

⚠Warning

FUEL

Fuel is extremely flammable and highly explosive.

Always switch off the engine of the vehicle and any mobile phones when refuelling.

Do not smoke or allow open flames or sparks near the vehicle when refuelling.

If fuel fumes are smelt while driving, the cause should be found and corrected without delay by a Holden Dealer.

Caution

FUEL ADDITIVES

Various additives are used in the formulation of good quality fuel and the use of supplementary additives in fuel is not required unless specified by Holden. Under no circumstances should fuel containing the manganese additive known as MMT (methyl cyclopentadienyl manganese tricarbonyl) be used, as this additive is known to cause contamination of catalytic converters, spark plugs and the malfunction of On-Board-Diagnostic (OBD) systems. The use of fuel additives that are not recommended by Holden may affect your New Vehicle Voluntary Warranty to the extent that Holden considers that the additives affect the specifications and quality of the vehicle.

Caution

USE OF FUEL CONTAINING ETHANOL

When purchasing such fuel, we recommend that the vehicle be operated on fuel containing no more than 10% ethanol.

Under no circumstances should fuel containing more than 10% ethanol be used. Use of such fuels may result in engine malfunction, starting and operating difficulties and materials degradation. These adverse effects could result in permanent damage to the vehicle and personal injury. It is also important to note that when ethanol blends are used, fuel consumption can be expected to increase due to the lower energy content of ethanol.

The use of fuel containing more than 10% ethanol may also affect your New Vehicle Voluntary Warranty to the extent that Holden considers that the fuel affects the specifications and quality of your vehicle.

The use of any fuel, other than the fuel specified below, may seriously damage the vehicle and may void the warranty. Only clean fuel of good quality should be used.

Fuel type

Use unleaded petrol of regular 91 Research Octane Number (RON) rating or higher.

Use of Premium unleaded petrol (95 RON or higher) may provide a small improvement in performance and fuel economy.

Refuelling

Always fill the fuel tank at the intermediate or fast fill rate. Do not add any more fuel after the fuel filler first clicks off or fuel blows back. This allows room for the fuel to expand inside the tank.

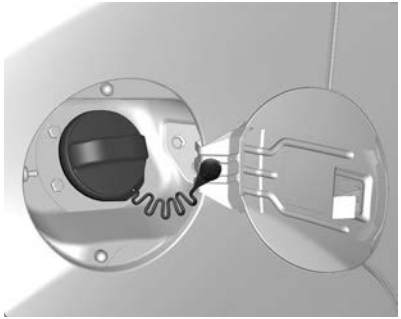
Wipe off any overflowing fuel immediately from the vehicle. Replace the fuel cap and close the fuel opening then spray or splash with water.

1. Stop the engine.

The fuel filler door release lever is located on the driver side floor:

2. Pull the lever.
3. Open the fuel filler door.
4. Turn the fuel filler cap slowly anticlockwise.

   If a hissing sound is heard, wait for it to stop before completely unscrewing the cap.



5. Remove the cap.

   The cap is tethered to the vehicle.
6. After refuelling, replace the cap by turning clockwise through several clicks.
7. Push the fuel filler door closed until it latches.

Note
If in cold weather, the fuel filler door does not open, tap the door lightly.

Tank capacity

See Capacities on page 135.

Vehicle care

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General information

Where specified, use only Holden genuine parts and accessories.

Emission information

The emission control systems are designed to reduce the amount of hydrocarbons (HC), carbon monoxide (CO), and oxides of nitrogen (NOx) that are emitted from the engine and fuel system into the atmosphere. HC and NOx, when exposed to sunlight under certain conditions, contribute to photochemical smog. In addition, CO is toxic when it becomes highly concentrated in the air.

Emission control system

Major emission control systems that the vehicle may have are:

1. Evaporative emission control system. This system is designed to prevent the escape of fuel vapour from the fuel system and recycle the vapours through the normal combustion process.
2. Crankcase emission control system. This system is designed to prevent blow-by gases from escaping into the atmosphere and recycle them through the combustion process.
3. Exhaust emission control system. The various components of this system operate collectively to limit HC, CO and NOx emissions in the exhaust gas. The exhaust emission control system consists of components including electronic control of spark, fuel and idle speed. In addition vehicles have a catalytic converter and closed loop mixture control system.

It is recommended that service and repair to fuel or emission systems be carried out by an authorised Holden Dealer.

Owner responsibility

The engine, engine control system and exhaust system of the vehicle must NOT be modified in any way.

⚠Warning

Any person who removes, modifies or hinders any part of the emission control system may be contravening Australian Design Rules. It is also illegal to drive a vehicle modified in this way.

Maintenance requirements

Have the vehicle serviced at the frequency shown in the Maintenance schedule, in the Service/Warranty Booklet.

It is recommended that servicing be carried out by an authorised Holden Dealer who will maintain the vehicle's emission control system as per the Service/Warranty Booklet.

Vehicle storage

If the vehicle is to be stored for several months:

- Wash and wax the vehicle.
- Clean and preserve rubber seals.
- Change engine oil.
- Drain the washer fluid reservoir.
- Check coolant and corrosion protection.
- Adjust the tyre pressure to the value specified for a full load.
- Park the vehicle in a dry, well ventilated place.
- Engage first or reverse gear to prevent the vehicle from moving.
- Do not apply the park brake.
- Open the bonnet, close all doors and lock the vehicle.

  Disconnect the clamp from the negative terminal of the vehicle battery.

  Close the bonnet.

Before returning the vehicle to the road:

- Connect the clamp to the negative terminal of the vehicle battery.

  Check the power windows operation.
- Check the tyre pressures.
- Fill the washer fluid reservoir.
- Check the engine oil level.
- Check the coolant level.

Vehicle checks

Doing your own service work

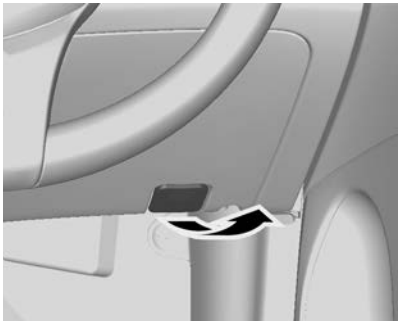
⚠Warning

Do not touch engine compartment components when the ignition is on due to extremely high voltages.

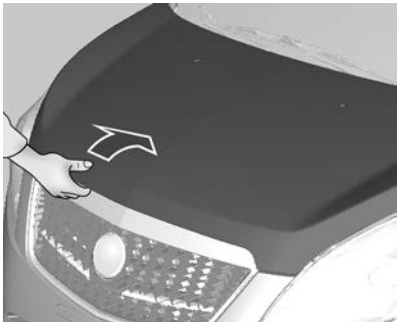
Note
The cooling fan may still operate when the ignition is off.

Bonnet

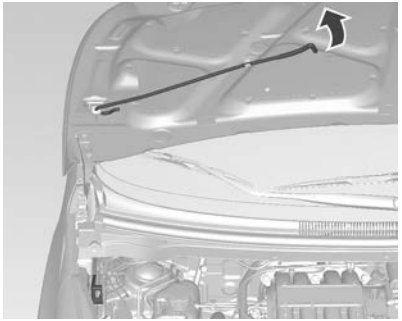
Opening



1. Pull the lever towards you.



2. Push up on the safety catch.



⚠Warning

When the engine is hot, only touch the foam padding of the support rod.

3. Pull the support rod away from the bonnet holder.
4. Rotate down and place into the catch alongside the engine compartment.

Closing

⚠Warning

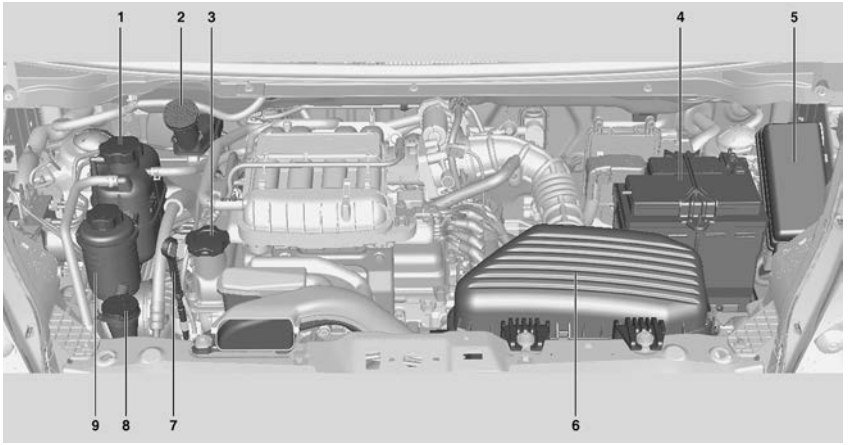
To avoid injury and/or damage to the vehicle, check each time, before the bonnet is closed, that the contact area is unobstructed.

1. Place the support rod into the bonnet holder.
2. Lower the bonnet and allow it to drop into the catch.
3. Check that the bonnet is engaged.

⚠Warning

If while driving you notice that the bonnet has not been properly closed, pull the vehicle over to the side of the road at the earliest possible moment and close the bonnet correctly.

Engine compartment overview



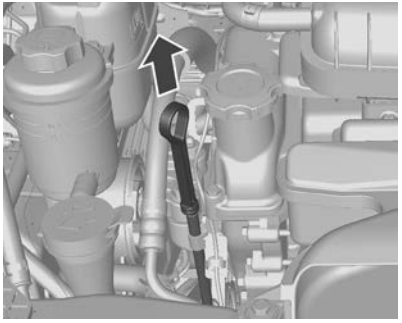
1. Engine coolant reservoir, see page 95
2. Brake fluid reservoir, see page 97
3. Engine oil reservoir, see page 93
4. Battery, see page 98
5. Fuse box, see page 107
6. Engine air filter, see page 94
7. Dipstick for engine oil, see page 93
8. Washer fluid reservoir, see page 97
9. Power steering fluid reservoir, see page 96

Engine oil

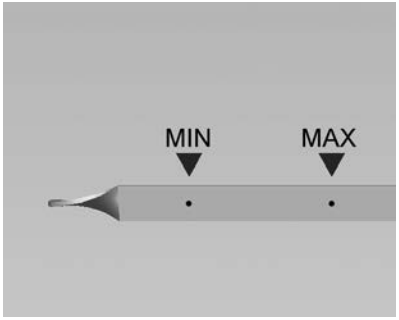
Checking oil level

- Check the engine oil level before a long journey.
- The engine must be at operating temperature and the ignition turned off for at least 5 minutes.

1. Park the vehicle on a level surface.
2. Remove the dipstick and wipe clean.
3. Insert the dipstick firmly.



4. Remove and read the oil level.

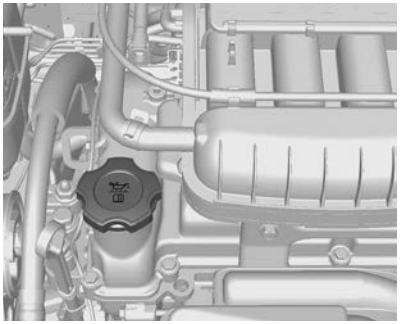


The level should be at the **MAX** mark. Add oil if the level is at the **MIN** mark.

5. Insert the dipstick to the stop on the handle and rotate half a turn.

Adding engine oil

See Capacities on page 135.



1. Rotate the engine oil filler cap anticlockwise and remove.
2. Add enough oil to reach below the **MAX** mark on the dipstick.
3. Check the level on the dipstick and add further oil if necessary.

   The engine oil must not exceed the **MAX** mark on the dipstick.

Caution
Overfilled engine oil must be drained or suctioned out.

4. Replace the engine oil filler cap tightly by rotating clockwise.

Note
Non-detergent and other low quality oils, the use of break-in oil, tune up compounds, friction reducing compounds and other supplemental additives are not recommended. Their use increases costs, may be detrimental to the operation of the vehicle and may void the New Vehicle Voluntary Warranty, to the extent that Holden considers the non-recommended fluid to have affected the specifications or quality of the vehicle.

⚠Danger

Engine oil is an irritant and if ingested, can cause illness or death.

Keep out of reach of children.

Avoid repeated or prolonged contact with skin.

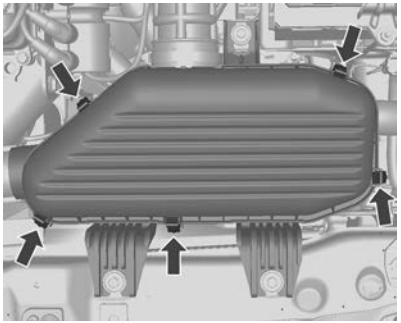
Wash exposed areas with soap and water or hand cleaner.

Be careful when draining the engine oil as it may be hot.

Engine oil change intervals

Refer to the Service/Warranty Booklet.

Engine air filter



Filter cover removal

1. Loosen the cover attaching clips.
2. Open the cover.
3. Replace the filter.
4. Lock the cover with the cover attaching clips.

Caution

Do not operate the vehicle without the filter installed. Engine damage may occur.

Engine coolant

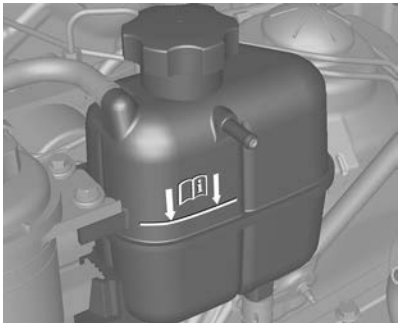
Engine coolant level

Check the coolant level at least once a week.

Checking coolant level

⚠Warning

Do not remove the radiator cap if the engine and radiator are still hot. Scalding fluid and steam can be blown out under pressure which could cause serious burns.



If the cooling system is cold, the coolant level should be above the line on the coolant reservoir.

Adding coolant

Caution

If the coolant level is too low, engine damage may occur.

Do not spill coolant on the vehicle's exterior surfaces as it can damage the paintwork. If you do, wash it off immediately.

Note

Use only approved coolant. See Recommended fluids, lubricants and parts on page 130.

1. Turn the ignition off.
2. Remove the coolant reservoir cap.
3. Add the required amount of coolant.
4. Replace the cap securely.

   If the coolant requires regular topping up, contact a Holden Dealer.

⚠Warning

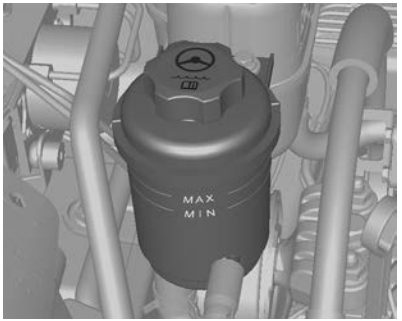
Avoid repeated or prolonged contact with coolant.

Wash off with soap and water.

Keep out of reach of children.

Power steering fluid

Adding power steering fluid



The power steering fluid level must be between the **MIN** and **MAX** marks.

Use only Holden specified power steering fluid. See Recommended fluids, lubricants and parts on page 130.

1. Turn the ignition off.

Caution

Extremely small amounts of contamination can cause steering system damage and cause it to not work properly.

Do not allow contaminants to contact the fluid side of the reservoir cap/dipstick or to enter the reservoir.

2. Rotate the power steering fluid reservoir cap anticlockwise and remove.
3. Add the required amount of power steering fluid.

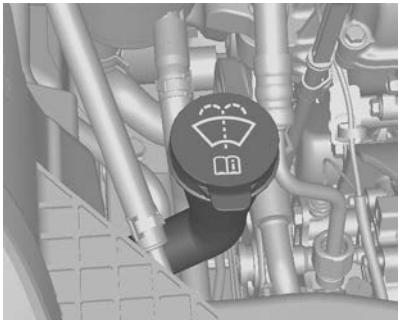
   Do not overfill the reservoir.

If the power steering fluid requires regular topping up, contact a Holden Dealer.

Caution

Do not operate the vehicle without the required amount of power steering fluid. Damage to the power steering system may occur.

Washer fluid



Check the fluid level weekly.

Adding washer fluid

1. Lift the front of the cap up.

   Use the correct amount of washer fluid additive. Refer to a Holden Dealer.

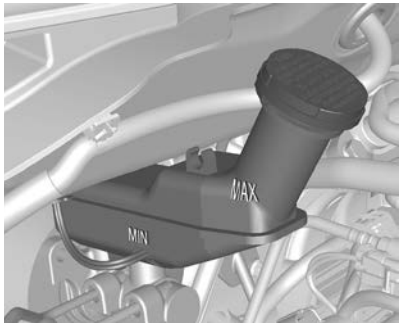
   Do not use ordinary soap or detergent as they froth up and damage the wiper rubbers.
2. Secure the cap.

Brake fluid

⚠Warning
Brake fluid is poisonous and corrosive and will damage the paint finish of the vehicle if spilt.

Caution
Avoid contact with eyes and skin. Wash any affected area immediately.

Checking brake fluid level



Check the brake fluid level weekly.

The level should be between the **MIN** and **MAX** area.

If the fluid level is correct, do not remove the reservoir cap, as brake fluid exposed to the atmosphere will quickly absorb moisture.

Adding brake fluid

See Recommended fluids, lubricants and parts on page 130.

1. Turn the ignition off.
2. Wipe the sides of the cap clean.

3. Rotate the brake fluid reservoir cap anticlockwise and remove.
4. Top up with the recommended brake fluid.

⚠Warning

Use only new brake fluid. Use of old, used or inferior brake fluid may endanger the functioning of the brake system.

5. Secure the cap and clean up any spilt fluid.

If the brake fluid requires regular topping up, contact a Holden Dealer immediately.

Caution

Do not dispose of used brake fluid with household waste.

Use the local, authorised waste management facility.

Battery

⚠Warning

Batteries emit an explosive gas mixture which may be ignited. Therefore, you should keep sparks and flames away from the battery at all times. Never smoke near a battery.

Batteries contain sulphuric acid. If acid contacts skin or clothing, flush immediately with plenty of water. In case of eye contact, flush with plenty of water and contact a doctor immediately. Battery acid also damages paint and fabrics. To minimise damage, wash off immediately.

Keep batteries out of the reach of children.

Take care with all metal objects and tools including items you may wear (for example jewellery, rings and metal watch bands) near battery terminals.

Battery replacement

For battery location, see Engine compartment overview on page 92.

For replacement, refer to a Holden Dealer or authorised repairer.

Caution

Do not dispose of batteries with household waste.

Use the local, authorised waste management facility.

Battery disconnection

The battery may discharge if the vehicle is not used for approximately four weeks.

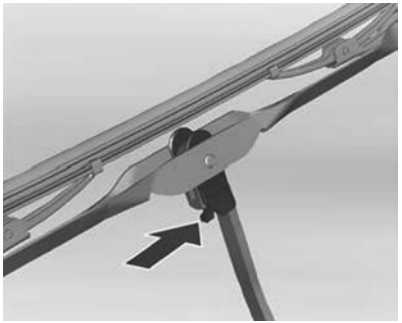
To disconnect the battery:

1. Turn the ignition off.
2. Disconnect the clamp from the negative terminal of the vehicle battery.

   Ensure the ignition is turned off before reconnecting the vehicle battery.

For emergency starting when the battery is flat, see Jump starting on page 121.

Wiper blade replacement



Regularly check the condition of the wiper blades.

1. Lift the wiper arm.
2. Press the release lever and detach the wiper blade.

For wiper blade cleaning, see Windows and windscreen wiper blades on page 126.

Bulb replacement

Contact a trained service technician if unsure about the bulb replacement process.

When replacing bulbs:

- Turn the ignition off and remove the key.
- Turn off related switches.
- Fit bulbs of the specified wattage only.
- Do not touch bulbs or reflectors with bare hands.
- Clean stained bulbs with methylated spirits.

Bulbs to be changed by a Holden Dealer

- Fog lamps

Caution

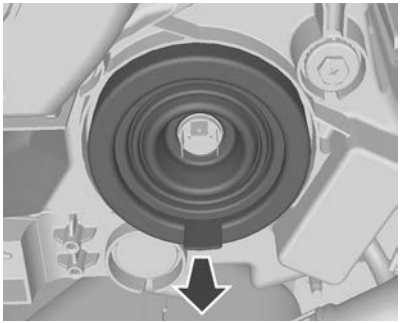
Condensation may temporarily appear on the inside of exterior lamp lenses after rain or washing the vehicle. Condensation occurs when there is a temperature difference between the inside and outside of the lamp allowing a fine mist on the inside surface of the lamp lens. This condensation will disappear when the vehicle is in a dry environment or the lamp is on. If water does collect in the lamp contact a Holden Dealer.

Headlamps

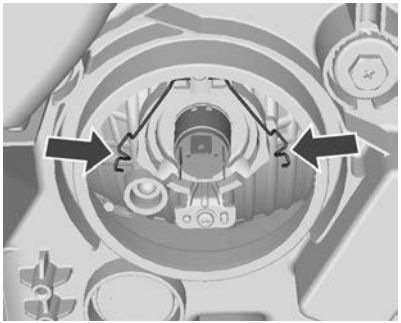
Front lamps are accessible from within the engine compartment.

Low and high beam:

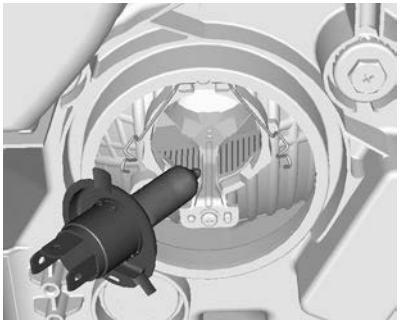
1. Detach the plug connector from the bulb.



2. Remove the protective cover.



3. Press the spring clip to disengage.



4. Remove the bulb from the reflector housing.

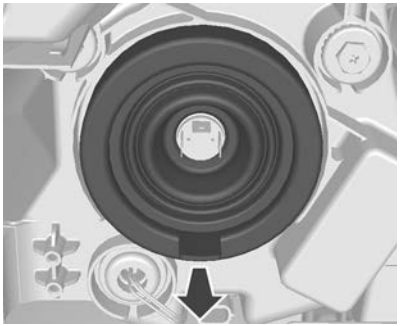
5. Fit the new bulb by engaging the lugs in the recesses on the reflector.
6. Engage the spring clip.
7. Place the headlamp protective cover into position and close.
8. Attach the plug connector onto the bulb.
9. Check lamp operation.

Headlamp aiming

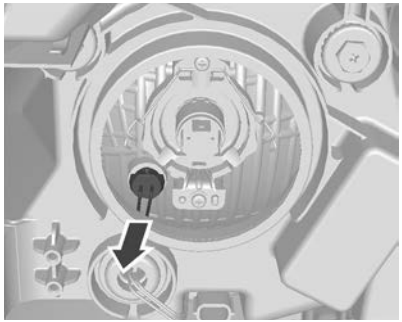
If the headlamps require adjustment, contact a Holden Dealer.

Parking lamps

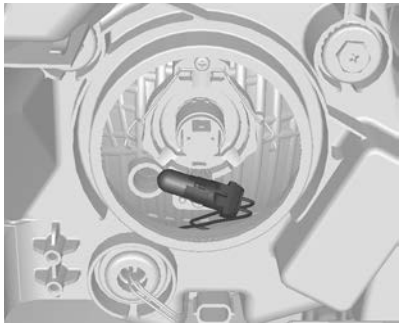
1. Detach the plug connector from the bulb.



2. Remove the protective cover.



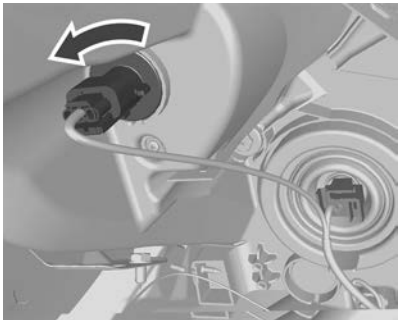
3. Remove the side lamp, bulb holder from the reflector.



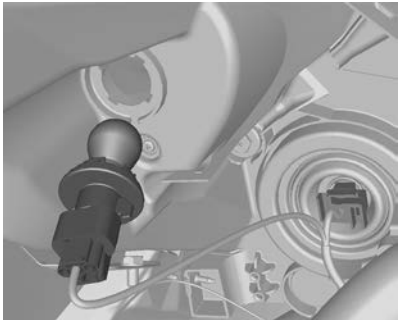
4. Remove the bulb from the socket.

5. Insert a new bulb.
6. Place the side lamp, bulb holder into the reflector.
7. Replace the headlamp protective cover into position and close.
8. Attach the plug connector onto the bulb.
9. Check lamp operation.

Front turn signal lamps



1. Rotate the bulb holder anticlockwise to disengage.

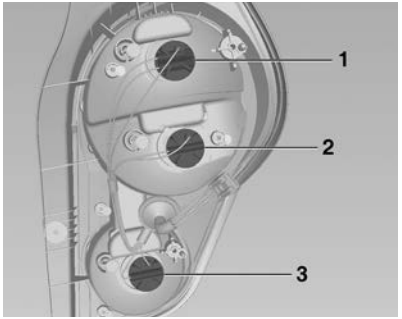


2. Push the bulb into the socket slightly and rotate anticlockwise to remove.
3. Insert a new bulb.
4. Place the bulb into the socket and rotate clockwise.
5. Replace the bulb holder and rotate clockwise to engage.
6. Check lamp operation.

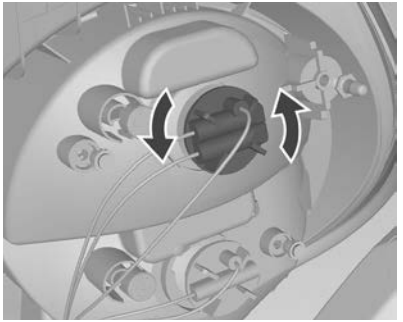
Tail lamps, turn signals, stop lamps and reverse lamps

1. Unscrew both screws.
2. Remove the tail lamp assembly.

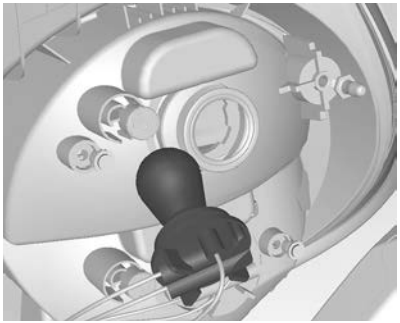
   Note
   Make sure the cable duct remains in position.



- Tail lamp/stop lamp (1)
- Turn signal lamp (2)
- Reverse lamp (3)



3. Rotate the bulb holder anticlockwise.

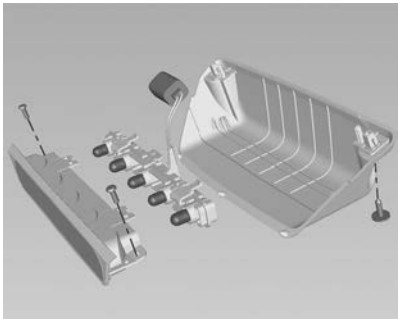


4. Push the bulb into the socket slightly and rotate anticlockwise to remove.
5. Insert a new bulb.
6. Insert the bulb holder into the tail lamp assembly and screw into place.
7. Install the tail lamp assembly into the body and tighten the screws.
8. Close the covers and engage.
9. Check lamp operation.

Side turn signal lamps

1. Push the lamp holder towards the rear of the vehicle and remove.
2. Rotate the bulb holder anticlockwise.
3. Pull the bulb out of the bulb holder.
4. Insert a new bulb.
5. Place the bulb into the bulb holder and rotate clockwise.
6. Replace the lamp holder.
7. Check lamp operation.

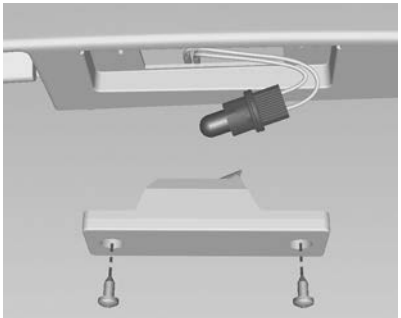
Centre High-Mounted Stop lamp (CHMSL)



1. Open the tailgate.
2. Remove the two screws and the lamp housing.
3. Disconnect the wiring harness connector.
4. Remove the two screws and the reflector assembly.
5. Remove the bulb by pulling it straight out of the bulb holder.
6. Install a new bulb.

7. Place the bulb into the bulb holder.
8. Replace the reflector assembly and the two screws.
9. Reconnect the wiring harness.
10. Replace the lamp housing and the two screws.
11. Close the tailgate.
12. Check lamp operation.

Number plate lamp



1. Unscrew the two screws.
2. Remove the bulb housing by pulling downwards.

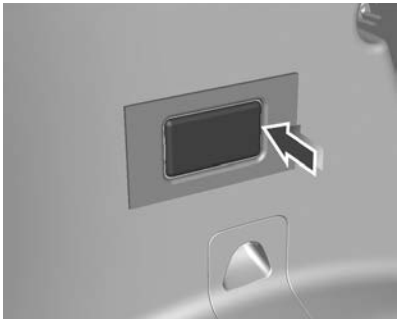
   Do not to pull on the cable.
3. Rotate the bulb holder anticlockwise to disengage.
4. Remove the bulb from the holder.
5. Insert a new bulb.
6. Insert the bulb holder into the bulb housing and rotate clockwise.
7. Insert the bulb housing and replace the two screws.
8. Check lamp operation.

Interior lamps

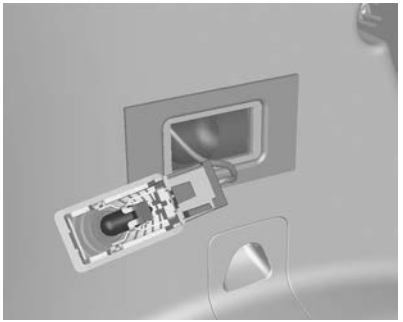
Courtesy lamps

1. Using a flat-blade screwdriver, prise the lamp assembly outwards, from the side opposite the lamp switch.
2. Remove the bulb.
3. Insert a new bulb.
4. Reinstall the lamp assembly firmly into place.
5. Check lamp operation.

Load compartment lamp



1. Using a flat-blade screwdriver, prise the lamp assembly outwards.



2. Remove the bulb.
3. Insert a new bulb.
4. Reinstall the lamp assembly firmly into place.
5. Check lamp operation.

Electrical system

Fuses

⚠Warning

Turn off the ignition (LOCK position) and any electrical equipment before changing a fuse.

- Replace blown fuses promptly.
- A blown fuse can be recognised by its melted wire.
- Do not replace the fuse until the cause of the fault has been remedied.
- Some functions are protected by several fuses.

Fuse extractor

A fuse extractor can be located in the fuse box in the engine compartment.

Place the fuse extractor on the top or side of the fuse to extract the fuse.

Replace the fuse cover securely after use.

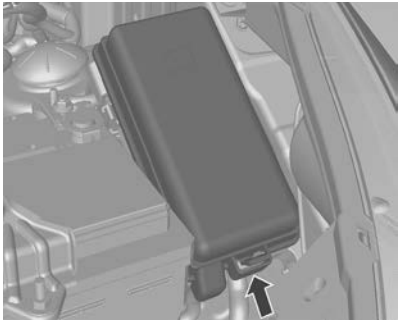
⚠Warning

When replacing a fuse be sure to use a fuse of the specified amperage.

Never install a wire or similar as it could damage electrical components and cause a fire.

Any improper alterations to the electrical system may cause a fire hazard and engine damage. To maintain your own safety and that of the vehicle, have any work involving the electrical system or the replacement of high current fuses or relays carried out by a Holden Dealer.

Engine compartment fuse box

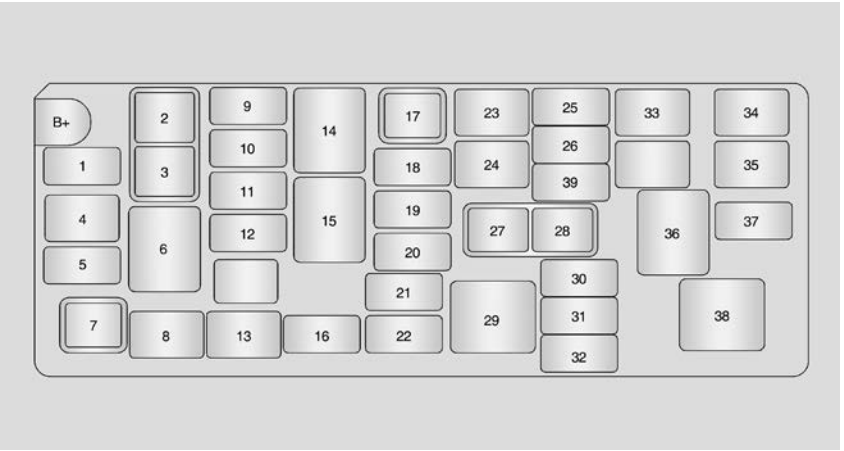


1. To disengage the cover, lift upwards and remove.

Note

- Not all fuse box descriptions may apply to your vehicle.
- When inspecting the fuse box, refer to the fuse box label inside the cover.

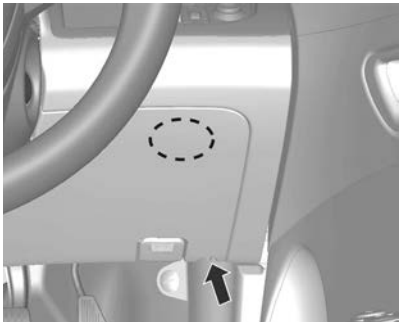
Engine compartment fuse box



1. Fuel pump
2. Parking lamp relay
3. Fan low relay
4. Fan high
5. Air conditioning
6. Fan high relay
7. Air conditioning relay
8. ABS2
9. Park LH
10. Park RH
11. Front fog
12. Fan low
13. ABS1
14. Front fog relay
15. Fuel pump relay
16. Spare fuse
17. Headlamp high relay
18. Headlamp high
19. Headlamp low LH
20. Headlamp low RH
21. Spare fuse
22. Spare fuse

23. Ignition2/starter
24. Ignition1/accessory
25. Hazard lamps
26. Horn
27. Headlamp low relay
28. Horn relay
29. Engine main relay
30. Ignition
31. EMS1
32. EMS2
33. Instrument panel battery
34. -
35. -
36. -
37. Engine control module
38. -

Instrument panel fuse box



The interior fuse block is located on the underside of the driver side of the dashboard.

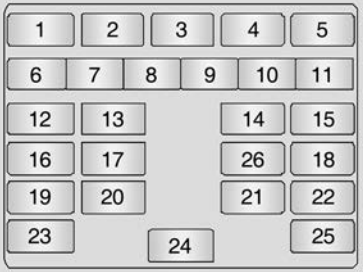
To remove the cover:

1. Remove the screw on the lower edge.
2. Pull the panel out at the edges to unclip.

To replace the cover:

1. Push the panel in at the edges to secure the clips.
2. Replace the screw.

Instrument panel fuse box



1. Rear wiper
2. Mirror/outside rear view mirror
3. Headlamp
4. Electric outside rear view mirror
5. Door lock
6. Front wiper
7. Spare fuse
8. Reverse lamps
9. Turn signals
10. Rear demister
11. -

12. Instrument panel
13. Blower
14. Airbag
15. Theft deterrent/data link connector
16. -
17. Rear power windows
18. Radio/remote keyless entry/ remote entry
19. Engine control module (ECM) /theft deterrent
20. Front power windows
21. Cigarette lighter
22. Stop lamps
23. Starter
24. Radio/clock/remote keyless entry
25. Instrument panel/interior lamps
26. -

Vehicle tools

Tools

Tyre repair kit

The vehicle may have an emergency tyre sealant and compressor kit in place of a spare tyre.

The tools, tyre sealant and compressor kit are located below the floor cover, in the load compartment.

Spare tyre

The vehicle may have a spare tyre.

The jack and tools are located in a tool kit, in the load compartment, above the spare wheel.

Wheels and tyres

Tyre and rim condition

- Do not drive over sharp edges to avoid tyre and rim damage and possible tyre blowout.
- Drive over edges slowly and at right angles, if possible.
- When parking, ensure the tyres are not pressed against the edge of the curb.
- Check the tyres regularly for damage, stones, punctures, cuts, cracks, bulges etc. Check the rims for damage. Contact a Holden Dealer, if in doubt.

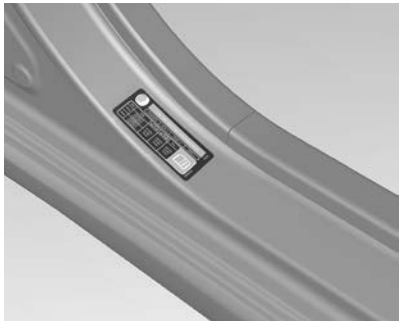
Tyre pressure

Keep the tyres at the recommended pressures to avoid increased fuel consumption, uneven and premature tyre wear.

The correct pressures are shown on the tyre placard and in the tyre pressure table. See Tyre pressure on page 135.

- Tyre pressure should be checked when cold as tyre pressure will increase as the tyres warm up.
- Check the air pressure of tyres (including the spare) weekly, to ensure occupant safety, as well as reducing fuel consumption and increasing the life of the tyres.
- Replace any valve dust caps or extensions.

Tyre placard



The correct pressures for tyres are shown on the tyre placard in the driver's door frame.

- Always inflate the spare tyre to the pressure specified for maximum load.
- Use the ECO tyre pressure for fuel economy driving at normal load.

Tread depth

Check tread depth at regular intervals.

- Replace the tyres when:

  They are worn to the point where the tread wear indicators (TWI) appear.

  The tyres originally fitted to the vehicle have built in TWI. These show as plain bars across the tread pattern at regular intervals across the tyre.

- If there is more wear on the front tyres than on the rear tyres, swap the front and rear wheels.

  Ensure that the direction of rotation of the wheels is the same as previous.

- Tyres age even if they are not used. Replacement of tyres every six years is recommended.

⚠Warning

Do not attempt to drive on a flat tyre more than is necessary to stop safely. Driving even a short distance can damage the tyre and wheel beyond repair. Tyres which have been repaired or retreaded are not capable of being driven safely at high speeds. Therefore, their use is not recommended.

Buying new tyres

Refer to the tyre placard on the vehicle for tyre size and load rating.

Using a different size or type of tyre may affect:

- Ride
- Handling
- Speedometer accuracy
- Vehicle ground clearance
- Tyre clearance
- Snow chain clearance

⚠Warning

Do not use different sizes or types of tyres and wheels than those originally fitted to the vehicle. Safety and performance of the vehicle may be affected. It may also affect handling and lead to serious injury.

When replacing tyres, install all four tyres and wheels of the same size, type, tread, brand and load-carrying capacity.

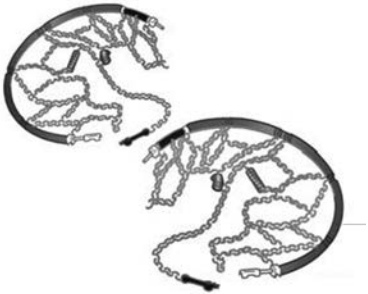
Wheel covers

Use wheel covers and tyres that are factory approved for the vehicle and which comply with all of the relevant wheel and tyre combination requirements.

⚠Warning

Use of incorrect tyres or wheel covers may result in damage to the vehicle and personal injury.

Tyre chains



Tyre chains are only permitted on the front wheels.

Always use fine mesh chains that add no more than 10 mm to the tyre tread and the inboard sides, including the chain lock.

⚠Warning

Tyre chains may only be used at speeds up to 50 km/h. Tyre chains should only be used for short distances if the roads are not snow covered. The hard road surface causes rapid wear and the chain may break. Tyre chain links should not be thicker than 10 mm and the clasp should be well away from the bodywork. Thicker chains may damage the vehicle body.

Tyre sealant and compressor kit

The vehicle may have an emergency tyre sealant and compressor kit, in place of a spare tyre.

The repair kit:

- Repairs minor damage to the tyre tread or sidewall.

  Do not remove any objects that have penetrated the tyre.
- Repairs damage up to 4 mm in the tread area of the tyre.
- Does not repair damage at the tyre's side wall, near the rim.

Take the vehicle to a Holden Dealer to have the tyre repaired or replaced as soon as possible.

⚠Warning

Do not drive faster than 80 km/h.

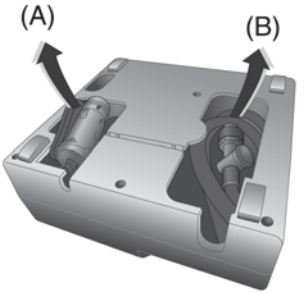
Do not drive on the repaired tyre for an extended time. Steering and handling may be affected.

Note

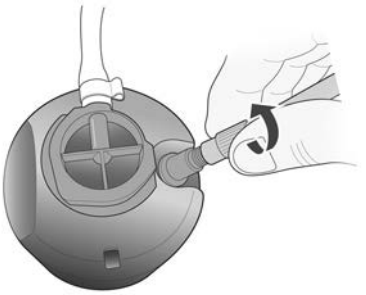
- If unusual noises are heard or the compressor becomes hot, turn the compressor off for at least 30 minutes.
- Check the expiry date on the tyre sealant canister before use. The tyre sealant canister must be replaced before its expiry date.
- The compressor and sealant can be used from approximately –30°C to 70°C.

Temporary puncture repair

1. Apply the park brake.
2. Place the shift lever into either first or reverse gear.
3. Remove the tyre repair kit from the compartment, under the floor cover, in the load compartment.
4. Remove the compressor and the sealant bottle.



5. Remove the electrical connection cable (A) and air hose (B) on the underside of the compressor.



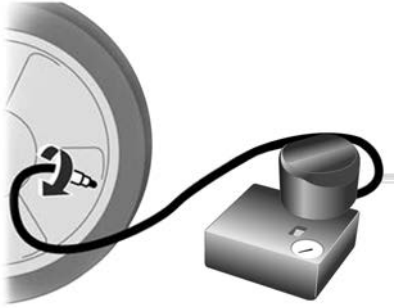
6. Place the switch on the compressor to **O**.

7. Screw the compressor air hose to the connection on the sealant bottle.
8. Connect the compressor plug to the accessory socket.
9. Start the engine and let it idle to ensure the battery does not run down.

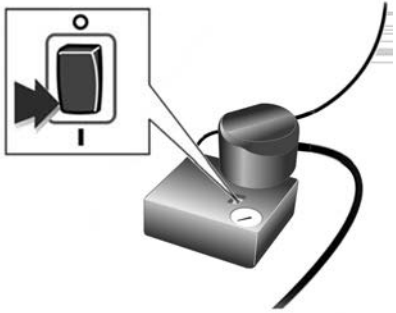
⚠Warning

Do not run the engine in an enclosed area or with passengers in the vehicle. See page 85 for exhaust gas warnings.

10. Place the compressor near the tyre so that the sealant bottle is upright.
11. Fit the sealant bottle into the retainer on the compressor.



12. Unscrew the valve cap from the defective tyre.
13. Screw the filler hose to the tyre valve.



14. Press the switch on the compressor to **I**.

    The tyre fills with sealant.

    The compressor pressure gauge briefly indicates up to 6 bar while the sealant bottle is emptying (approx. 30 seconds).

    The pressure starts to drop.

    Once the sealant is pumped into the tyre, the tyre is inflated.
15. The tyre pressure (approximately 2.2 bar) should be obtained within 10 minutes.

16. When the correct pressure is obtained, switch off the compressor.

⚠Warning

Do not over inflate tyres due to risk of injury or damage to the tyre.

17. If the tyre pressure is not obtained within 10 minutes, remove the tyre repair kit.
18. Move the vehicle one tyre rotation.
19. Reattach the tyre repair kit and continue the filling procedure for 10 minutes.

⚠Warning

If the recommended pressure cannot be reached after approximately 10 minutes, the vehicle should not be driven. The tyre is too severely damaged and the tyre sealant and air compressor kit cannot inflate the tyre. Disconnect and stow the tyre sealant and air compressor kit back in its original position. Contact a Holden Dealer.

20. Drain excess tyre pressure with the button over the pressure indicator.

    Do not run the compressor longer than 10 minutes.
21. Detach the tyre repair kit.
22. Push the catch on the bracket to remove the sealant bottle from the bracket.
23. Screw the tyre inflation hose to free the connection from the sealant bottle. This prevents sealant from escaping.
24. Stow the tyre sealant and air compressor kit in the load compartment.

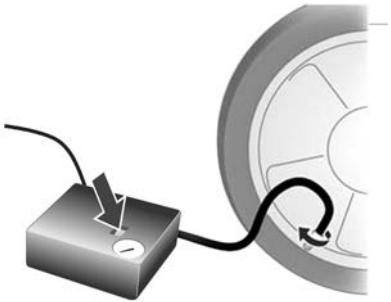
⚠Warning

Always stow the tyre sealant and air compressor kit in its original position. Unsecured loads increase the risk of injury during heavy braking, sudden avoidance manoeuvres or a collision.

25. Remove any excess sealant using a cloth.
26. After inflating the tyre, remove the maximum speed label and place it in a visible location.

    It reminds you to drive cautiously and not to exceed 80 km/h until the damaged tyre is replaced or repaired.

27. Continue driving immediately so that sealant is evenly distributed within the tyre.
28. After driving approximately 10 km (but no more than 10 minutes), stop at a safe location to check the tyre pressure.



29. Screw the compressor air hose directly onto the tyre valve and compressor to check the tyre pressure.
30. If the tyre pressure is more than 1.3 bar, set it to the correct value (approx. 2.2 bar).
31. Repeat the procedure from Step 27 until there is no more loss of pressure.

    If the tyre pressure has fallen below 1.3 bar, do not continue driving. Contact a Holden Dealer.
32. Dispose of the used tyre sealant canister at a Holden Dealer or in accordance with local and State codes and practices. Replace with a new canister.
33. Stow the tyre sealant and compressor kit in the load compartment.

This is a temporary puncture repair. Take the vehicle to a Holden Dealer to have the tyre repaired or replaced as soon as possible.

Tyre changing

The vehicle may have a spare tyre.

⚠Warning

All passengers must be out of the vehicle when it is being jacked.

Do not jack a vehicle with a trailer attached. Remove the trailer first.

Only jack the vehicle on hard, level surfaces.

Ensure moving parts of the jack are adequately lubricated before use.

Use the jack only at the designated lifting points. Use in other locations may result in the vehicle falling off the jack, or damage to the vehicle.

Do not start or run the engine while the vehicle is supported by the jack.

Use the jack only for lifting the vehicle when changing wheels.

Do not get under a vehicle that is supported by a jack. No person should place any portion of their body under a vehicle that is supported by a jack.

Vehicles with alloy wheels may have a steel spare wheel. Drive carefully and do not exceed 80 km/h if the tyre size or tread pattern of the spare tyre is different to the other tyres on the vehicle. Although the spare tyre was fully inflated when the vehicle was new, it can lose air over time. Check the inflation pressure regularly.

After installing the spare tyre on the vehicle, stop as soon as possible to check the inflation pressure is correct. Have the flat tyre repaired or replaced and installed back on the vehicle as soon as possible.

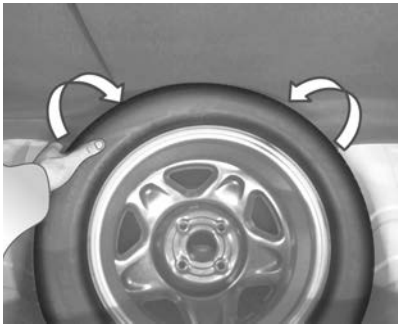
Removing the spare tyre

The spare tyre is located in the load compartment beneath the floor covering.

1. Park on a hard, level surface, in a safe location.
2. Apply the park brake firmly.
3. Switch the hazard warning flashers on.
4. Remove the ignition key.
5. Apply the park brake.
6. Place the shift lever into reverse gear.
7. Chock the wheel diagonally opposite the flat tyre with a suitable solid object.

   Note
   Do not change more than one wheel at one time.
8. Fold down the rear seatback on the driver side:

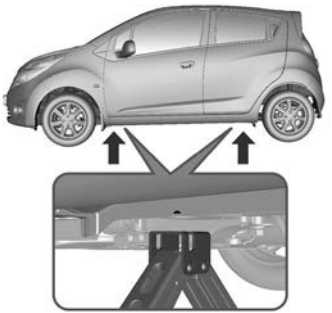
   Pull the release knob upwards and fold.
9. Remove the tools from the load compartment.
10. Undo the wing nut.



11. Remove the spare wheel from the load compartment:

    Lift from the forward face to remove, not from the rear.

12. Place the wheel wrench over the wheel nuts and loosen by half a turn, but do not remove the wheel nuts.



13. Position the jack beneath the jack location closest to the wheel being changed.

    The locations are identified by cutouts in the underside of the door sill.

14. Rotate the jack handle to raise the head slightly.

15. Attach the jack handle to the jack and attach the wheel wrench to the jack handle.
16. Wind the jack up by hand until it engages with the jacking point.

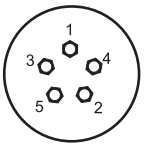
    Ensure that the jack is not tilted and the base is resting squarely on the ground.

⚠Warning

Failure to position the jack as described could cause the vehicle to slip off the jack.

Do not get under a vehicle that is supported by a jack. No person should place any portion of their body under a vehicle that is supported by a jack.

17. Rotate the wrench checking the correct position of the jack, until the wheel is clear of the ground.
18. Unscrew the wheel nuts and place in a clean, dry place.
19. Exchange the wheel on the vehicle with the spare wheel.
20. Clean the wheel nuts and thread before replacing, then lightly tighten with the wheel nut wrench.
21. Lower the vehicle by reversing the jacking procedure.
22. Remove the jack from under the vehicle.



23. With the wheel on the ground, use the extended wheel nut wrench to tighten the wheel nuts in the sequence shown.

24. Replace the flat tyre and tools in the load compartment.
25. Lift the rear seatback upwards and push firmly back into place.
26. Have the flat tyre renewed or repaired.

⚠Warning

As soon as possible after changing a wheel, have the wheel nuts tightened with a torque wrench to 120 Nm (Newton metres). Wheel nuts must be tightened evenly to the correct torque, as wheel nuts which have not been tightened properly could eventually allow the wheel to come off while the vehicle is moving.

Jump starting

Read the following warnings and procedure in full before attempting to jump start the vehicle.

If you are still unsure about jump starting, Holden strongly recommends for your safety and that of the vehicle that you seek the assistance of a suitably trained service technician.

⚠Warning

Do not push start or tow start the vehicle. If unburnt fuel were to reach the catalytic converter and ignite, the converter could overheat or be destroyed by backfire. Therefore, if the battery is flat, jump start, but do not push start the vehicle.

Batteries produce explosive gases, contain corrosive acids and supply levels of electrical current high enough to cause burns. Therefore, adhere to the following when working near a battery:

- Do not attempt jump starting directly from the battery in the engine compartment.
- Do not let the jumper lead clamps touch each other or other metal parts.
- Do not allow the jumper leads to contact any rotating engine components.

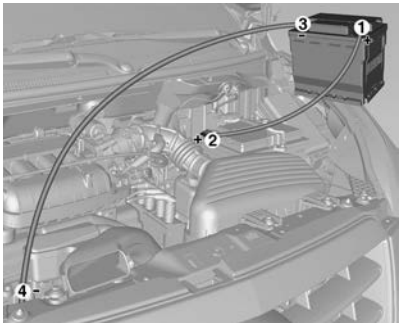
- Do not use open flames or sparks near the battery.
- Do not smoke near the battery.
- Never use a quick charger to start the engine.
- The battery must be removed from the vehicle for recharging.
- Wear eye protection such as safety glasses and avoid leaning over the battery.
- Battery acid is corrosive. If it gets on your skin, wash with plenty of water immediately. If it gets in your eyes you should not only flush with lots of water, but should also seek medical help. Battery acid also damages paint and fabrics. To minimise damage, wash it off immediately.
- Remove rings, metal watch bands and other metal jewellery before working around the battery.

- If a permanently connected hands free telephone kit is fitted to the vehicle, remove the fuse for the telephone kit before jump starting. Remember to replace the fuse afterwards.

- A discharged battery can freeze at temperatures of 0°C.

  Defrost the frozen battery before connecting jumper leads.
- Use a booster battery with the same voltage (12 volts). Its capacity (Ah) must not be much less than that of the discharged battery.
- Use jumper leads with insulated terminals and a cross section of at least 16 mm^2.
- Do not disconnect the discharged battery from the vehicle.
- Switch off all unnecessary electrical devices.
- The vehicles must not come into contact with each other during the jump starting process.

1. Position the two vehicles so that they are not touching.
2. Apply the park brakes.
3. Place the shift lever in neutral.
4. Turn the ignition off.
5. Turn off all lamps and accessories in both vehicles, except the hazard warning flashers or any lights needed for the work area.



6. Connect one end of the RED lead to the positive terminal of the booster battery (1).

7. Connect the other end of the RED lead to the positive terminal of the discharged battery (2).
8. Connect the BLACK lead to the negative terminal of the booster battery (3).
9. Connect the other end of the BLACK lead to a vehicle grounding point, such as the engine block or an engine mounting bolt (4).

   Connect as far away from the discharged battery as possible (at least 60 cm).

   Note
   Route the leads so that they cannot catch on rotating parts within the engine compartment.
10. Start the engine of the vehicle providing the jump start and allow to idle for at least 5 minutes.
11. Start the engine of the vehicle with the flat battery.

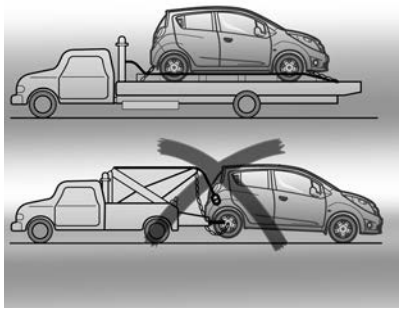
    Start attempts should be made for no longer than 15 seconds at an interval of 1 minute.
12. Allow both engines to idle for approximately 3 minutes with the leads connected.
13. Switch on the headlamps and the heated rear window of the vehicle that received the jump start.
14. Leave the engines running while removing the BLACK negative jumper lead first, followed by the RED positive jumper lead.

Note
While removing each clamp, do not touch any other metal while the other end remains attached.

Towing

Towing the vehicle

Flat-bed tow truck



A flat-bed tow truck is the best method of towing the vehicle to avoid damage.

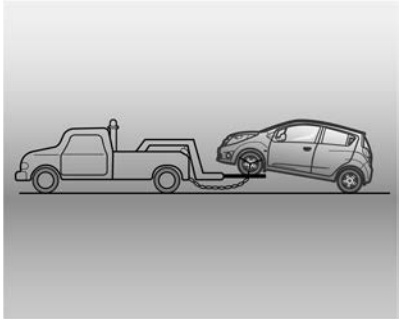
When loading onto a flat-bed tow truck, only use the rear towing eye to pull the vehicle. See Towing another vehicle on page 124.

Caution

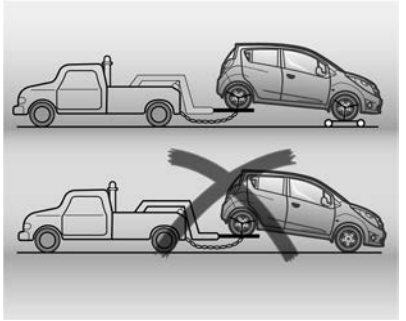
To prevent damage, do not use the front lashing points for towing the vehicle.

Standard tow truck

If a flat-bed tow truck is not available:



1. Use a standard tow truck, where the front wheels are raised and the rear wheels are in contact with the ground.



2. Alternatively, use a standard tow truck and a towing dolly to prevent the front wheels from contacting the road.

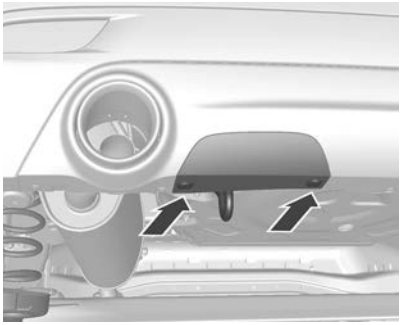
Caution

If the vehicle is towed with the front wheels contacting the road, the vehicle's drive system could be severely damaged.

Towing another vehicle

The rear towing eye is located under the rear bumper.

The towing eye must only be used for towing and not for recovering a vehicle.



The vehicle has a cover on the rear bumper, in front of the rear towing eye.

1. Remove the two clips from the cover.
2. Disengage the cover by pulling backwards.

3. After towing, reinstall the cover firmly.

⚠Warning
To prevent damage, use only proper towing equipment.

Appearance care

Exterior care

Washing

The paintwork of the vehicle is exposed to environmental influences. Wash and wax regularly. When using automatic vehicle washes, select a programme that includes waxing.

Bird droppings, dead insects, resin, pollen and the like should be cleaned off immediately, as they contain aggressive constituents which can cause paint damage. Failure to do so may result in permanent damage, particularly in hot weather conditions.

Road bloom is a gradual build up of road and environmental grime. This should be removed with a paint cleaner once a year, in addition to normal washing.

If using a vehicle wash, comply with the vehicle wash manufacturer's instructions. Never use an automatic wash that requires anything touching the paint (other than water). The wipers must be switched off. Remove the antenna and external accessories.

If you wash your vehicle by hand, make sure that the insides of the wheel housings are also thoroughly rinsed out.

Clean edges and folds on opened doors and the bonnet as well as the areas they cover.

Have the door hinges of all doors greased by a Holden Dealer.

Caution
Do not clean the engine compartment with a steam-jet or high-pressure jet cleaner.

Thoroughly rinse and chamois off the vehicle. Rinse chamois frequently. Use separate chamois for painted and glass surfaces: remnants of wax on the windows will impair vision.

Do not use hard objects to remove spots of tar. Use tar removal spray on painted surfaces.

⚠Warning

Take care when moving the vehicle after washing, in case water has affected the brakes. Applying the brakes lightly will indicate whether they have been affected. To dry them quickly, lightly apply the brakes while maintaining a slow forward speed with a clear area ahead, until brake performance returns to normal.

Exterior lamps

Headlamp and other lamp covers are made of plastic. Do not use any abrasive, solvent based cleaners or caustic agents and do not dry-clean them.

Air intakes

Clear debris from the air intakes, between the bonnet and windscreen and below the front bumper, when washing the vehicle.

Polishing and waxing

Wax the vehicle regularly (at the latest when water no longer beads).

Polishing is necessary only if the paint has become dull or if solid deposits have become attached to it.

Paintwork polish with silicone forms a protective film, making waxing unnecessary.

Plastic body parts must not be treated with wax or polishing agents.

Windows and windscreen wiper blades

Use a soft lint-free cloth or chamois leather together with window cleaner and insect remover.

- Never use abrasive cleaners to clean glass.
- Refer to a Holden Dealer for windscreen washer additive.
- Old wiper blades can cause windscreen scratching. Regularly inspect and replace them.

Caution

Do not operate the wiper blades by hand as this damages the wiper drive mechanism.

When cleaning the rear window, make sure the heating element inside is not damaged.

Clean smearing wiper blades with a soft cloth and window cleaner.

Wheels and tyres

Do not use high-pressure jet cleaners.

- Remove oil and grease with soap and water or detergent.
- Do not use petrol to clean tyres.
- Use a good quality tyre and bumper shine if required.
- A good quality wheel cleaner can be used for cleaning alloy wheels.
- Do not use abrasive cleaners.

Paintwork damage

Rectify minor paintwork damage with a touch-up pen before rust forms.

Have more extensive damage or rust areas repaired by your Holden Dealer.

Caution

Do not spill coolant on the vehicle's exterior surfaces as it can damage the paint work. If you do, wash it off immediately.

Underbody

Substances can cause rust under the vehicle.

- Hose the underbody with clean water whenever the vehicle is washed.
- Where the vehicle is exposed to heavy concentrations of corrosive materials, inspect and wash the complete underbody at least once each year, preferably after winter exposure.

Interior care

⚠Warning

Many cleaning products are toxic, flammable or may damage the interior. When cleaning the interior, avoid volatile cleaners such as acetone, lacquer thinners, enamel reducers, nail polish removers, or cleaners such as laundry soaps, bleaches or reducing agents. Never use carbon tetrachloride, petrol or naphtha for any cleaning purpose. Ensure that the vehicle is well ventilated while using any cleaners and always follow the cleaning product manufacturer's recommendations. Water based cleaners, rather than solvent based cleaners, are recommended.

Steam cleaning of seats is not recommended.

Interior and upholstery

Only clean the vehicle interior, including the instrument panel fascia and panelling, with a dry cloth or interior cleaner.

The instrument panel should only be cleaned using a soft damp cloth.

Clean fabric upholstery with a vacuum cleaner and brush. Remove stains with an upholstery cleaner.

Clean seat belts with a mild, non-abrasive soap and lukewarm water.

After washing, thoroughly, sponge the solution out of the belts.

Caution
Close Velcro fasteners as open Velcro fasteners on clothing could damage seat upholstery.

Plastic and rubber parts

Plastic and rubber parts can be cleaned with the same cleaner as used to clean the body. Use interior cleaner if necessary. Do not use any other agent. Avoid solvents and petrol in particular. Do not use high pressure jet cleaners.

Service and maintenance

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Recommended fluids, lubricants and parts 130

General information

Service information

In order to ensure economical and safe vehicle operation and to maintain the value of your vehicle, it is of vital importance that all maintenance work is carried out at the proper intervals as specified.

See your Service/Warranty Booklet for the service schedules and for more information.

Recommended fluids, lubricants and parts

Engine type	1.2L petrol
Engine oil specification	5W/30 dexos (dexos™ 1);
Coolant specification	50% clean fresh water and 50% Dexcool® anti-freeze coolant, conforming to specification number GM6277M
Manual transmission fluid	SAE 75W-85W; API GL4
Brake fluid	DOT 4 Hydraulic brake fluid, conforming to specification number GMW3356
Power steering fluid	Dexron® VI
Battery	12 volts, 50 amp hours

Technical data

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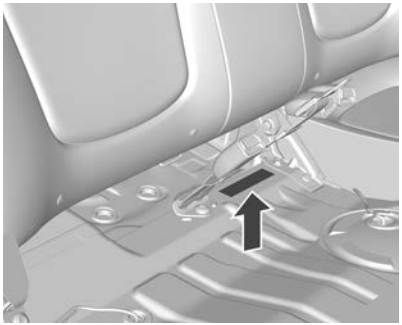
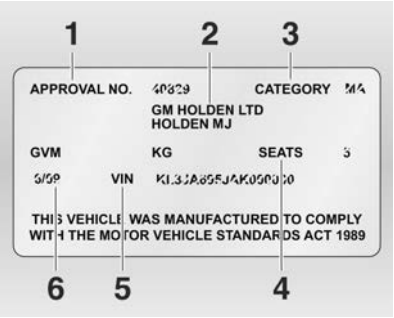
Vehicle identification

Vehicle identification number (VIN)



Each vehicle has its own, individual International Standards Organisation Vehicle Identification Number (ISOVIN), which is shown under the rear seat cushion.

Identification plate



An identification label is located on the front passenger's door frame.

The label shows:

1 = Approval number

2 = Manufacturer

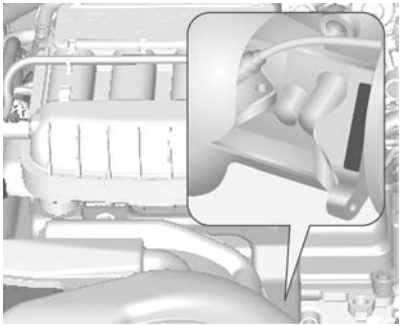
3 = Category

4 = Number of seats

5 = Vehicle identification number

6 = Build date

Engine serial number



The engine serial number is located in the front part of the engine compartment.

Vehicle data

Engine data

Engine type	1.2 L DOHC Petrol
Number of cylinders	4
Engine identifier code	B12D1
Engine	1206 cc
Engine power	Please refer to holden.com.au
Engine torque	Please refer to holden.com.au
Octane rating (RON)	Unleaded regular 91 or higher
Ethanol compatibility	E10

Vehicle weight

Overloading is a safety hazard and could also shorten the life of the vehicle.

Maximum vehicle payloads

	Occupants (average 68 kg each)	Luggage (kg)	Total load (kg)
5 door hatch	5	68	408

Axle loads

Maximum front and rear axle loads

Do not exceed the maximum axle loads, including the weight of any options or accessories fitted to the vehicle. Weigh at a weighbridge if unsure.

	Front axle load (kg)	Rear axle load (kg)
5 door hatch	750	700

Dimensions (mm)

	Length	Width excl. mirrors	Width incl. mirrors	Height	Wheel base
5 door hatch	3595	1597	1910	1522	2375

The above figures are based on the design dimensions.

Capacities

Engine type	1.2 L DOHC Petrol
Refill engine oil including filter (approximately)	3.8 L
Coolant (approximately)	4.7 L
Fuel tank	35.0 L

Tyre pressure

Tyre size	Recommended pressure													
	Normal load				Maximum load				Eco normal load				Spare	
	Front		Rear		Front		Rear		Front		Rear		-	
	kPa	PSI	kPa	PSI	kPa	PSI	kPa	PSI	kPa	PSI	kPa	PSI	kPa	PSI
165/60 R15	220	32	220	32	235	34	235	34	240	35	240	35	-	-
155/70 R14													235	34

Customer information

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Customer satisfaction procedure

We want you to be happy with your new vehicle, together with the people you deal with while you have the vehicle.

Normally, any problems with the sales, operation, servicing, parts/accessories or the validity of original equipment supplied with your vehicle will be handled by your Holden Dealer Sales and Service Department.

We realise however that, with the best intentions, misunderstandings sometimes occur.

Therefore, we suggest you discuss any concern with one of the Holden Dealer management people.

If you have not received satisfaction from the Sales Manager or Service Manager, go to the General Manager or to the Dealer Principal.

By now you should have satisfaction. If not, the Holden Customer Assistance office is at your disposal.

Customer assistance offices

Australia

The Holden Customer Assistance representatives can be telephoned from anywhere within Australia for only the cost of a local call.

The contact number is:

1800 033 349

Naturally, telephoning is the quickest and the best way to contact. However, if you prefer to write the address is:

The Manager
Holden Customer Assistance Centre
GPO Box 1714
Melbourne 3001

Your letter should clearly outline your concern or query and include:

- Your name and address
- Telephone numbers, both private and business
- Servicing dealer's name and address
- Vehicle model
- Vehicle identification number (I.S.O.V.I.N.), refer to the inside front cover of the Service/ Warranty Booklet in your vehicle's glove box
- Date of purchase
- Current odometer reading

Most of this information will be found on the Vehicle Identification Certificate, located inside the front cover of the Service/Warranty Booklet in your vehicle's glove box.

Before you write however, remember that the telephone is the quicker and more efficient means of communication.

New Zealand

The information in this Owner's Handbook applies primarily to Australian Holden vehicles and there may be some differences to the Warranty and Owner Assistance provisions for New Zealand.

Applicable details for New Zealand are set out in the Holden Warranty and Owner Assistance Information booklet enclosed in the New Zealand glove box wallet.

New Zealand Assistance can be reached on:

0800 HOLDEN (**0800 465 336**)

This number provides access to New Zealand Roadside Assistance as well as New Zealand Customer Assistance.

If you prefer to write the address is:

The Manager
Holden Customer Assistance Centre
P.O Box 11195
Ellerslie
Auckland 1542
New Zealand

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